

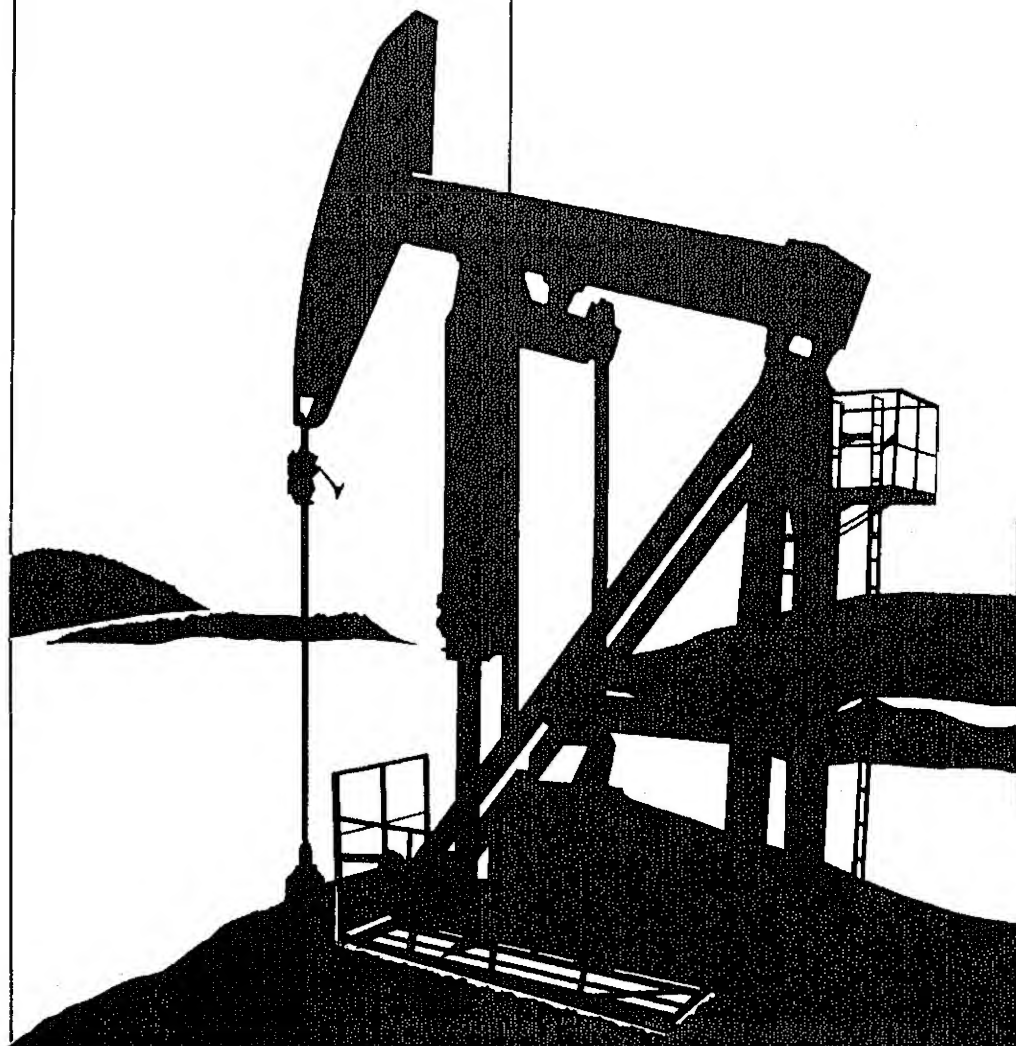


DOE/EIA-0109(82/12)

# Petroleum Supply Monthly



Energy Information Administration  
Office of Oil and Gas  
**U.S. Department of Energy**



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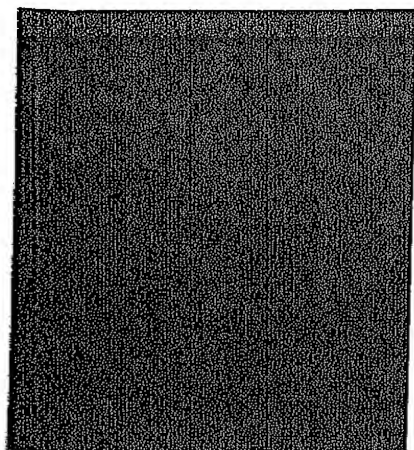
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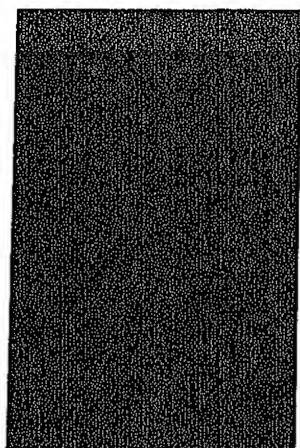
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# **Petroleum Focus**









## A high-contrast, black and white photograph of an oil drilling rig. The rig is a tall, slender lattice structure with a small platform near the top. It stands on a dark, flat, silhouetted landscape. The sky is bright and featureless. A thin vertical line, possibly a fence or another structure, is visible to the right of the rig. The overall image has a grainy, high-contrast quality.



# Crude Oil<sup>1</sup> and Petroleum Products Overview

		Field Production			Stock Withdrawal <sup>2</sup>			Ending Stocks <sup>3</sup>
		Total Domestic <sup>4</sup>	Crude Oil	Natural Gas Plant Production	Crude Oil <sup>5</sup>	Petroleum Products	Petroleum Products Supplied	Crude Oil <sup>5</sup> and Petroleum Products
		Thousand Barrels per Day						Millions of Barrels
1973	AVERAGE	10,975	9,208	1,738	11	-146	17,308	1,008
1974	AVERAGE	10,498	8,774	1,688	-62	-117	16,653	1,074
1975	AVERAGE	10,045	8,375	1,633	-17	-145	16,322	1,133
1976	AVERAGE	9,774	8,132	1,603	-39	96	17,461	1,112
1977	AVERAGE	9,913	8,245	1,618	-170	-378	18,431	1,312
1978	AVERAGE	10,328	8,707	1,567	-78	172	18,847	1,278
1979	AVERAGE	10,179	8,552	1,584	-148	-25	18,513	1,341
1980	AVERAGE	10,214	8,597	1,573	-98	-42	17,056	1,392
1981	January	10,231	8,540	1,652	50	1,159	18,430	1,388
	February	10,294	8,604	1,653	-278	250	16,989	1,389
	March	10,272	8,613	1,624	-632	224	15,907	1,401
	April	10,195	8,557	1,599	-595	148	15,350	1,415
	May	10,160	8,501	1,593	-391	-374	15,353	1,438
	June	10,287	8,629	1,594	-135	406	16,095	1,430
	July	10,098	8,500	1,548	-360	91	15,682	1,439
	August	10,243	8,593	1,614	397	-999	15,263	1,457
	September	10,281	8,604	1,612	-285	-341	15,655	1,476
	October	10,225	8,563	1,598	-760	477	15,822	1,485
	November	10,269	8,586	1,630	-325	-233	15,593	1,501
	December	10,220	8,585	1,590	-170	745	16,596	1,484
	AVERAGE	10,230	8,572	1,609	-290	130	16,058	
1982	January	10,257	8,669	1,548	-236	1,129	15,890	1,461
	February	10,261	8,690	1,524	-216	1,268	15,941	1,431
	March	10,212	8,597	1,570	-65	1,049	15,560	1,401
	April	10,296	8,652	1,588	107	1,594	16,048	1,350
	May	10,223	8,660	1,520	49	-34	14,845	1,349
	June	10,242	8,681	1,505	86	-515	14,931	1,362
	July	10,228	8,649	1,521	-155	-865	14,771	1,394
	August	10,301	8,701	1,543	-440	4	14,838	1,407
	September	10,306	8,733	1,513	252	-489	14,921	1,415
	October*	10,283	8,676	1,540	R-564	R-55	R 14,820	R 1,434
	November**	NA	8,690	NA	-134	-214	14,709	1,443
	AVERAGE	NA	8,672	NA	-121	254	15,201	

<sup>1</sup> Includes lease condensate.

<sup>2</sup> A negative number indicates an increase in stocks and a positive number indicates a decrease.

<sup>3</sup> Ending stocks for 1973-1980 are totals as of December 31.

<sup>4</sup> Includes crude oil, natural gas plant production, other hydrocarbons and alcohol.

<sup>5</sup> Includes stocks located in the Strategic Petroleum Reserve.

Totals may not equal sum of components due to independent rounding.

NA = Not available. R = Revised data.

\* See Explanatory Note 5.1.

\*\* Italics denote preliminary data. See Explanatory Note 2.7.

Note: Annual stock changes for 1975 and 1981 were calculated using expanded survey coverage.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

# Crude Oil<sup>1</sup> and Petroleum Products Overview ( continued )

		Imports <sup>2</sup>			Exports <sup>3</sup>			Net <sup>5</sup> Imports
		Total	Crude Oil <sup>4</sup>	Petroleum Products	Total	Crude Oil	Petroleum Products	
Thousand Barrels per Day								
1973	AVERAGE	6,256	3,244	3,012	231	2	229	6,025
1974	AVERAGE	6,112	3,477	2,635	221	3	218	5,892
1975	AVERAGE	6,056	4,105	1,951	209	6	204	5,846
1976	AVERAGE	7,313	5,287	2,026	223	8	215	7,090
1977	AVERAGE	8,807	6,615	2,193	243	50	193	8,565
1978	AVERAGE	8,363	6,356	2,008	362	158	204	8,002
1979	AVERAGE	8,456	6,519	1,937	472	235	237	7,984
1980	AVERAGE	6,909	5,263	1,646	544	287	258	6,365
1981	January	6,827	4,932	1,895	558	339	219	6,270
	February	6,772	4,873	1,899	569	198	371	6,203
	March	6,028	4,521	1,507	586	210	376	5,442
	April	5,668	4,338	1,330	570	198	372	5,098
	May	5,775	4,287	1,489	595	312	283	5,180
	June	5,435	4,061	1,375	420	123	297	5,015
	July	5,816	4,296	1,521	571	257	314	5,245
	August	5,767	4,179	1,588	644	204	440	5,123
	September	6,365	4,740	1,624	519	194	325	5,845
	October	5,959	4,380	1,579	738	226	512	5,221
	November	5,741	4,046	1,695	701	278	423	5,041
	December	5,843	4,137	1,706	656	189	467	5,187
	AVERAGE	5,996	4,396	1,599	595	228	367	5,401
1982	January	5,232	3,648	1,585	829	238	591	4,404
	February	4,691	2,949	1,742	804	304	499	3,887
	March	4,461	2,856	1,606	882	321	561	3,579
	April	4,286	2,813	1,474	786	174	611	3,501
	May	4,784	3,314	1,471	803	262	542	3,981
	June	5,227	3,782	1,445	703	94	609	4,524
	July	5,763	4,245	1,518	741	229	512	5,022
	August	5,156	3,820	1,336	858	304	554	4,298
	September	5,359	3,603	1,757	791	184	606	4,569
	October*	R 5,230	R 3,636	R 1,594	932	270	662	4,298
	November**	5,189	3,688	1,501	NA	NA	NA	NA
		AVERAGE	5,038	3,492	1,546	NA	NA	NA

<sup>1</sup> Includes lease condensate.

<sup>2</sup> Includes shipments from United States possessions and territories.

<sup>3</sup> Includes shipments to United States possessions and territories.

<sup>4</sup> Includes crude oil for storage in the Strategic Petroleum Reserve.

<sup>5</sup> Net Imports = Imports minus Exports.

Totals may not equal sum of components due to independent rounding.

NA = Not available. R = Revised data.

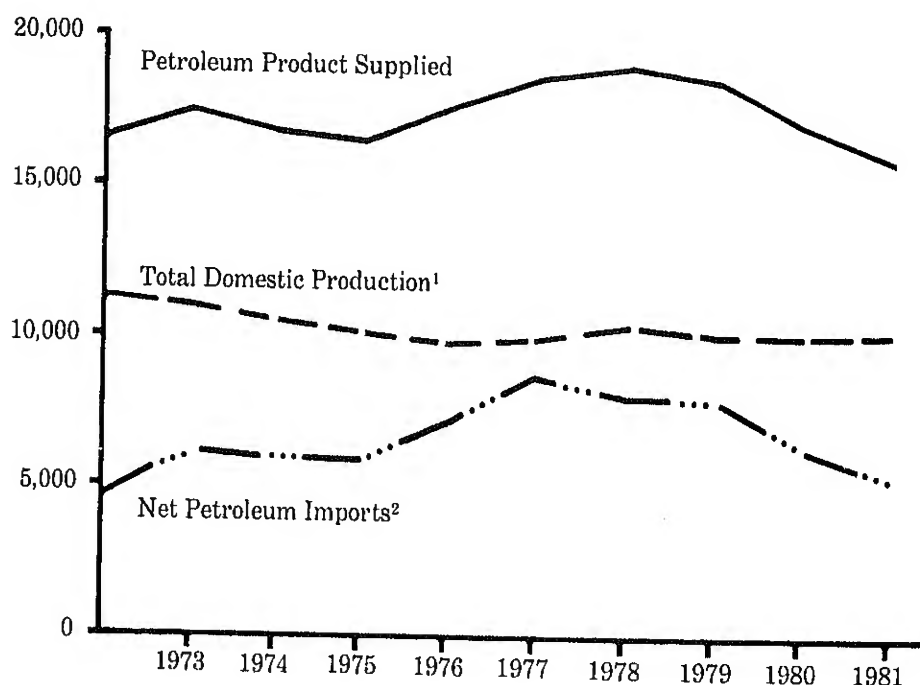
\* See Explanatory Note 5.1.

\*\* Italics denote preliminary data. See Explanatory Note 2.7.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

# **Petroleum Overview, Annual** (Thousand Barrels per Day)



<sup>1</sup>Includes crude oil and natural gas plant production.

<sup>2</sup>Includes SPR imports.

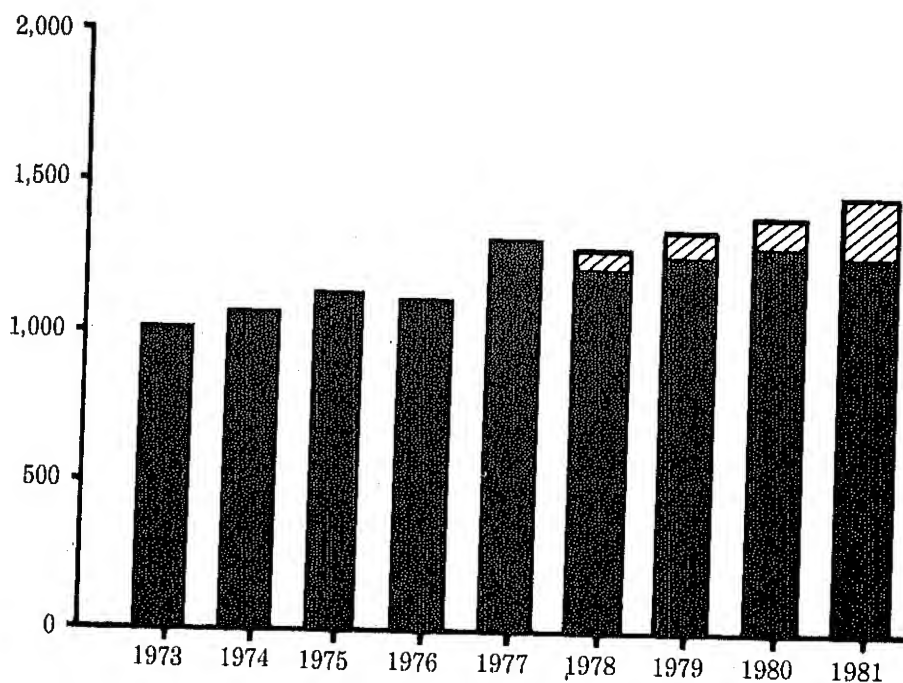
Source table: "Crude Oil and Petroleum Products Overview."

## **Crude Oil and Petroleum Products Ending Stocks, Annual** (Millions of Barrels)

### **Legend**

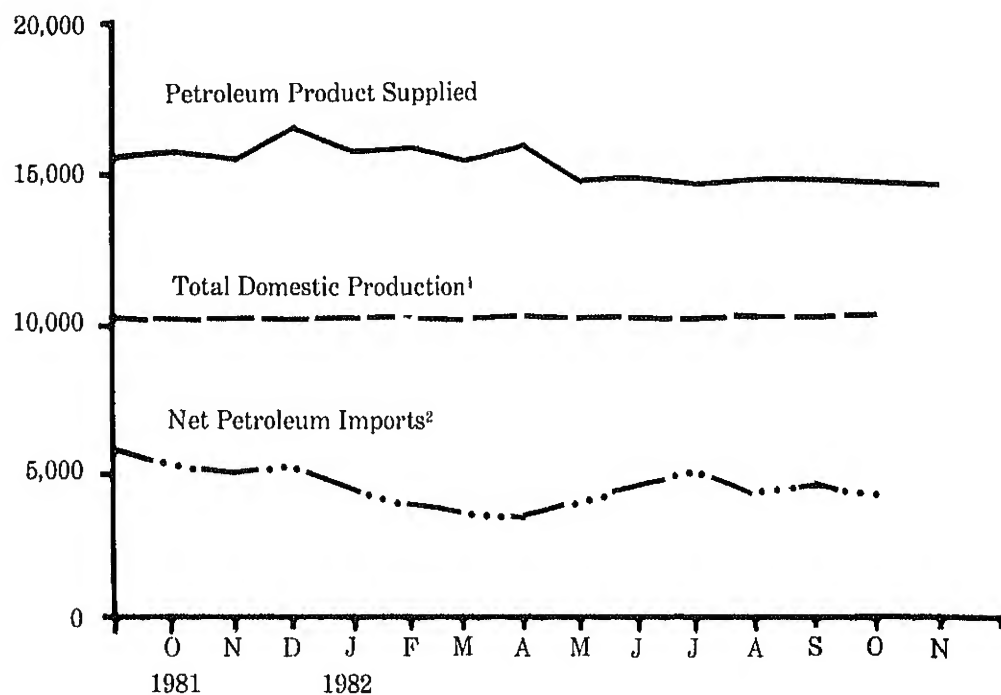
▨ SPR Crude Oil

■ Crude Oil and Petroleum Products, Excluding SPR



Source tables: "Crude Oil and Petroleum Products Overview" and "Crude Oil Supply and Disposition."

## Petroleum Overview, Monthly (Thousand Barrels per Day)



<sup>1</sup>Includes crude oil and natural gas plant production.

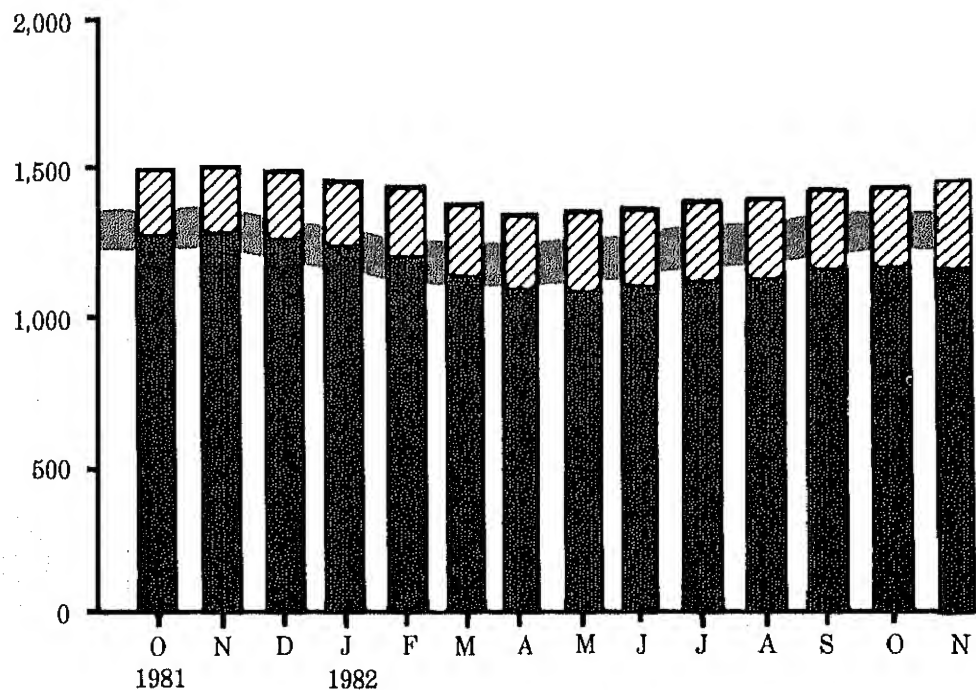
<sup>2</sup>Includes SPR imports.

Source table: "Crude Oil and Petroleum Products Overview."

## Crude Oil and Petroleum Product Ending Stocks, Monthly (Millions of Barrels)

### Legend

- SPR Crude Oil
- Crude Oil and Petroleum Products, Excluding SPR
- Average Stock Range<sup>1</sup>



<sup>1</sup>Average stock range (excluding SPR) based on 3 years of data. See Explanatory Note 2.5.

Source tables: "Crude Oil and Petroleum Products Overview" and "Crude Oil Supply and Disposition."

# Crude Oil<sup>1</sup> Supply and Disposition

		Supply						
		Field Production		Imports <sup>2</sup>			Stock Withdrawal <sup>3</sup>	
		Total Domestic	Alaskan	Total	SPR <sup>4</sup>	Other	SPR <sup>4</sup>	Other
		Thousand Barrels per Day						
1973	AVERAGE	9,208	198	3,244		3,244		11
1974	AVERAGE	8,774	193	3,477		3,477		-62
1975	AVERAGE	8,375	191	4,105		4,105		-17
1976	AVERAGE	8,132	173	5,287		5,287		-39
1977	AVERAGE	8,245	464	6,615	21	6,594	-20	-150
1978	AVERAGE	8,707	1,229	6,356	162	6,195	-163	84
1979	AVERAGE	8,552	1,401	6,519	67	6,452	-67	-81
1980	AVERAGE	8,597	1,617	5,263	44	5,219	-45	-52
1981	January	8,540	1,606	4,932	106	4,826	-151	201
	February	8,604	1,619	4,873	80	4,793	-127	-150
	March	8,613	1,618	4,521	140	4,382	-155	-477
	April	8,557	1,608	4,338	272	4,066	-444	-151
	May	8,501	1,580	4,287	386	3,901	-513	122
	June	8,629	1,632	4,061	318	3,743	-434	299
	July	8,500	1,605	4,296	175	4,121	-324	-36
	August	8,583	1,602	4,179	257	3,922	-372	769
	September	8,604	1,607	4,740	435	4,305	-486	201
	October	8,563	1,596	4,380	453	3,927	-501	-259
	November	8,586	1,614	4,046	271	3,774	-259	-66
	December	8,585	1,623	4,137	165	3,971	-252	82
	AVERAGE	8,572	1,609	4,396	256	4,141	-336	46
1982	January	8,669	1,712	3,648	170	3,478	-159	-77
	February	8,690	1,715	2,949	159	2,790	-213	-3
	March	8,597	1,702	2,856	185	2,671	-235	170
	April	8,652	1,687	2,813	190	2,623	-233	341
	May	8,660	1,725	3,314	204	3,110	-176	225
	June	8,681	1,675	3,782	105	3,678	-105	191
	July	8,649	1,715	4,245	97	4,147	-97	-58
	August	8,701	1,699	3,820	208	3,611	-208	-233
	September	8,733	1,707	3,603	139	3,463	-143	395
	October*	8,676	1,677	R 3,636	R 216	R 3,420	R -216	R -348
	November**	8,690	1,667	3,688	163	3,525	-164	29
	AVERAGE	8,672	1,698	3,492	167	3,324	-177	56

<sup>1</sup> Includes lease condensate.

<sup>2</sup> Includes shipments from United States possessions and territories.

<sup>3</sup> A negative number indicates an increase in stocks and a positive number indicates a decrease.

<sup>4</sup> Strategic Petroleum Reserve.

Totals may not equal sum of components due to independent rounding.

NA = Not available. R = Revised data.

\* See Explanatory Note 5.2.

\*\* Italics denote preliminary data. See Explanatory Note 2.7.

Note: Annual stock changes for 1975 and 1981 were calculated using expanded survey coverage.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Crude Oil<sup>1</sup> Supply and Disposition ( continued )

		Supply (Continued)		Disposition		Ending Stocks <sup>2</sup>		
		Unac- counted for Crude Oil	Crude Used Directly and Losses	Refinery Inputs	Exports <sup>3</sup>	Total Crude Oil	SPR <sup>4</sup>	Other Primary
		Thousand Barrels per Day				Millions of Barrels		
1973	AVERAGE	3	-32	12,431	2	242		242
1974	AVERAGE	-25	-28	12,133	3	265		265
1975	AVERAGE	17	-30	12,442	6	271		271
1976	AVERAGE	77	-33	13,416	8	285		285
1977	AVERAGE	-6	-30	14,602	50	348	7	340
1978	AVERAGE	-57	-30	14,739	158	376	67	309
1979	AVERAGE	-11	-29	14,648	235	430	91	339
1980	AVERAGE	34	-28	13,481	287	466	108	358
1981	January	113	-49	13,247	339	486	112	374
	February	-41	-58	12,902	198	494	116	378
	March	154	-63	12,383	210	514	121	393
	April	51	-62	12,091	198	532	134	397
	May	286	-62	12,309	312	544	150	394
	June	49	-65	12,415	123	548	163	385
	July	147	-65	12,261	257	559	173	386
	August	16	-63	12,908	204	547	185	362
	September	-295	-65	12,505	194	555	199	356
	October	166	-66	12,057	226	579	215	364
	November	279	-68	12,240	278	589	223	366
	December	52	-67	12,349	189	594	230	363
	AVERAGE	83	-63	12,470	228			
1982	January	-138	-66	11,638	238	606	235	371
	February	199	-66	11,252	304	612	241	371
	March	278	-68	11,277	321	614	249	366
	April	56	-68	11,386	174	611	256	355
	May	105	-65	11,801	262	609	261	348
	June	110	-67	12,498	94	607	264	343
	July	1	-63	12,447	229	612	267	345
	August	140	-59	11,858	304	625	274	352
	September	-218	-59	12,126	184	618	278	340
	October*	324	-53	R 11,750	270	R 635	285	R 351
	November**	NA	NA	11,792	NA	644	289	354
	AVERAGE	NA	NA	11,805	NA			

<sup>1</sup> Includes lease condensate.

<sup>2</sup> Ending stocks for 1973-1980 are totals as of December 31.

<sup>3</sup> Includes shipments to United States possessions and territories.

<sup>4</sup> Strategic Petroleum Reserve.

Totals may not equal sum of components due to independent rounding.

NA = Not available. R = Revised data.

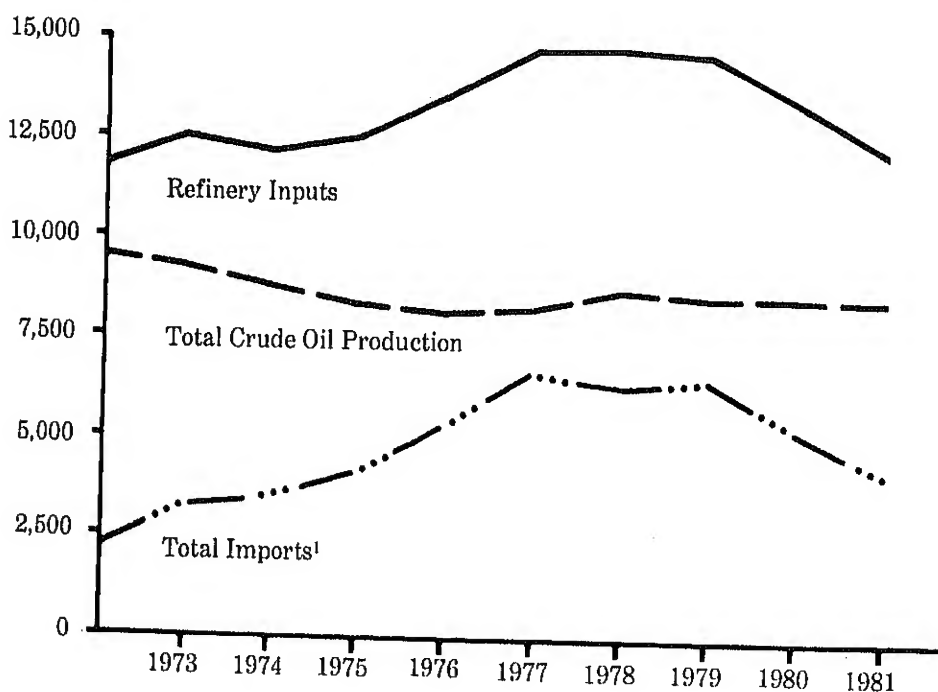
\* See Explanatory Note 5.2.

\*\* Italics denote preliminary data. See Explanatory Note 2.7.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

# Crude Oil Supply and Disposition, Annual (Thousand Barrels per Day)



¹Includes SPR imports.

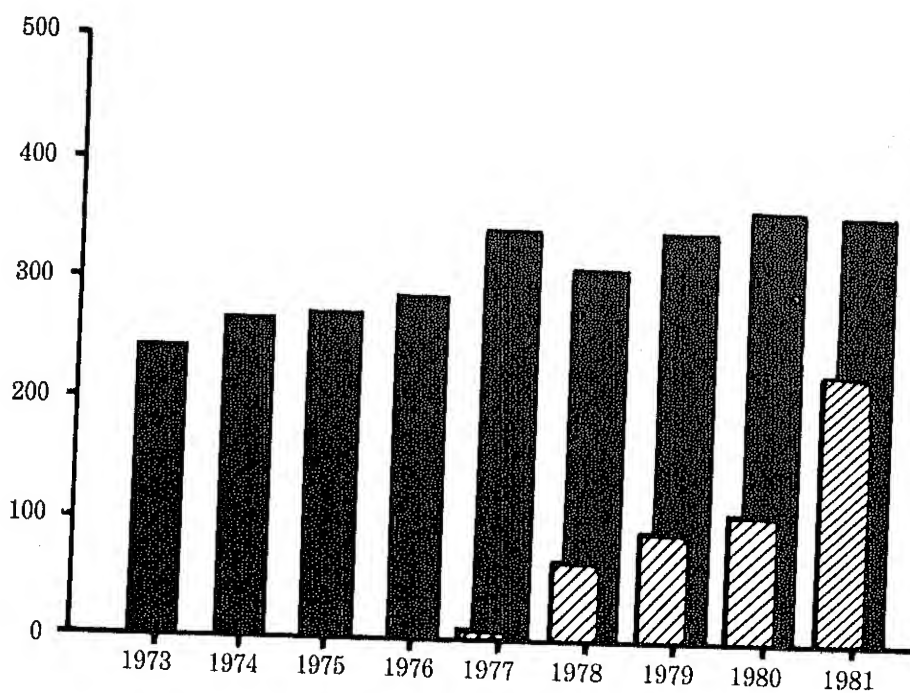
Source table: "Crude Oil Supply and Disposition."

## Crude Oil Ending Stocks, Annual (Millions of Barrels)

### Legend

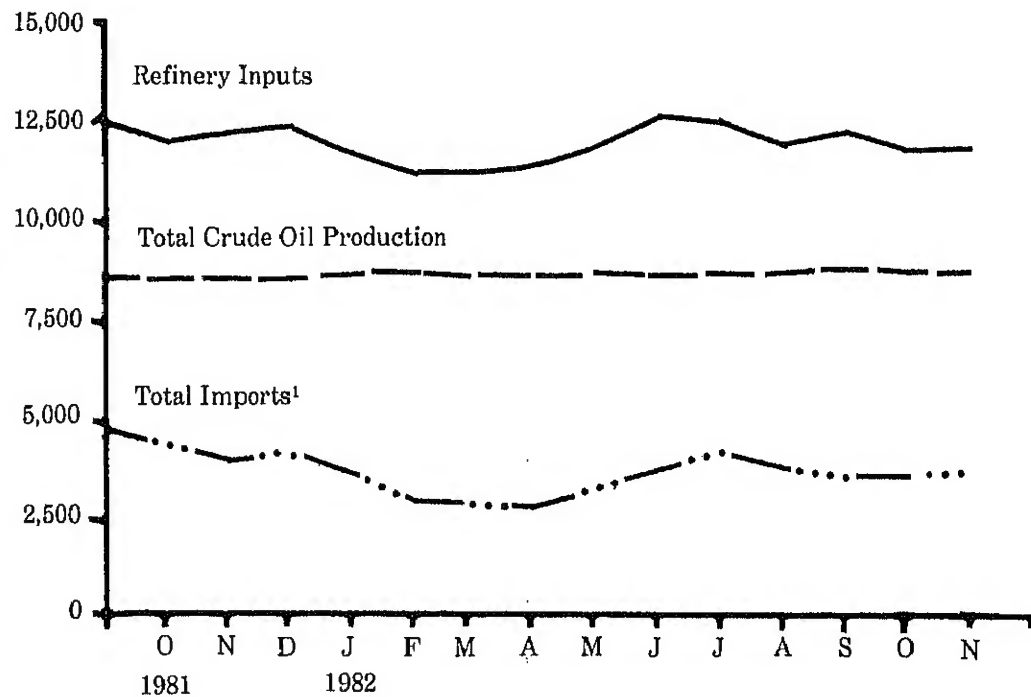
SPR

Other Primary



Source table: "Crude Oil Supply and Disposition."

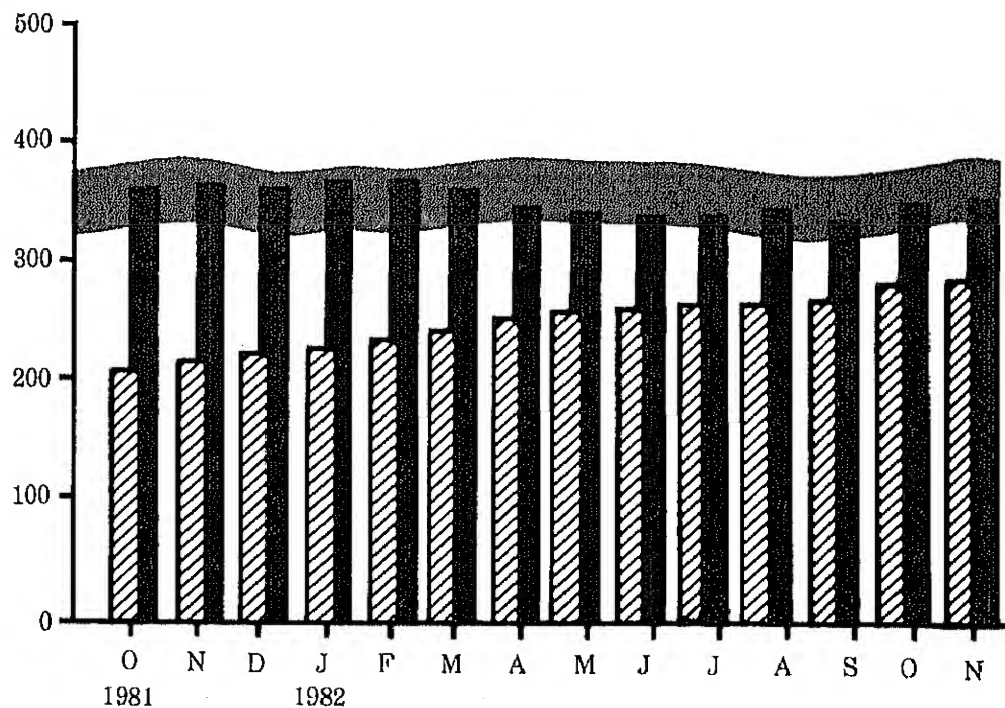
## Crude Oil Supply and Disposition, Monthly (Thousand Barrels per Day)



## Crude Oil Ending Stocks, Monthly (Millions of Barrels)

**Legend**

- SPR
- Other Primary
- Average Stock Range¹



¹Average stock range (excluding SPR) based on 3 years of data. See Explanatory Note 2.5.

Source table: "Crude Oil Supply and Disposition."



# Finished Motor Gasoline Supply and Disposition

		Supply			Disposition				Ending Stocks	
		Total Produc- tion	Imports <sup>1</sup>	Stock With- drawal <sup>1 2</sup>	Exports	Product Supplied			Total Motor Gasoline <sup>3</sup>	Finished Motor Gasoline
						Total	Unleaded <sup>4</sup>	Unleaded		
Thousand Barrels per Day								Percent of Total	Millions of Barrels	
1973	AVERAGE	6,535	134	9	4	6,674	NA	NA	209	
1974	AVERAGE	6,360	204	-24	2	6,537	NA	NA	218	
1975	AVERAGE	6,520	184	-28	2	6,675	NA	NA	235	
1976	AVERAGE	6,841	131	10	3	6,978	NA	NA	231	
1977	AVERAGE	7,033	217	-72	2	7,177	1,976	27.5	258	
1978	AVERAGE	7,169	190	54	1	7,412	2,521	34.0	238	
1979	AVERAGE	6,852	181	2	( <sup>5</sup> )	7,034	2,798	39.8	237	
1980	AVERAGE	6,506	140	-66	1	6,579	3,067	46.6	261	
1981	January	6,715	138	-421	( <sup>5</sup> )	6,431	3,141	48.8	276	227
	February	6,308	111	-118	1	6,301	3,095	49.1	284	230
	March	6,213	171	-81	( <sup>5</sup> )	6,303	3,097	49.1	285	232
	April	6,114	186	303	( <sup>5</sup> )	6,602	3,284	49.7	272	223
	May	6,122	150	344	1	6,615	3,115	47.1	259	213
	June	6,220	186	622	1	7,028	3,419	48.6	242	194
	July	6,405	151	268	( <sup>5</sup> )	6,823	3,424	50.2	228	186
	August	6,611	124	-95	3	6,637	3,344	50.4	233	189
	September	6,564	169	-70	2	6,662	3,338	50.1	237	191
	October	6,426	147	7	3	6,578	3,257	49.5	236	190
	November	6,564	148	-338	1	6,373	3,198	50.2	248	201
	December	6,586	197	-91	11	6,681	3,444	51.5	253	203
		AVERAGE	6,405	157	28	2	6,588	3,264	49.5	
1982	January	6,181	114	-358	18	5,920	3,033	51.2	262	214
	February	5,917	133	28	8	6,070	3,145	51.8	262	213
	March	6,004	183	469	44	6,612	3,396	51.4	248	199
	April	6,104	177	641	33	6,890	3,494	50.7	223	180
	May	6,322	163	188	23	6,650	3,415	51.3	215	174
	June	6,767	195	-136	14	6,812	3,561	52.3	220	178
	July	6,788	200	-165	24	6,799	3,574	52.6	226	183
	August	6,447	284	-60	16	6,655	3,520	52.9	226	185
	September	6,530	215	-217	22	6,507	3,385	52.0	234	191
	October*	R 6,253	177	-25	15	R 6,391	3,360	52.6	R 234	192
	November**	6,171	NA	NA	NA	6,448	NA	NA	226	NA
		AVERAGE	6,319	NA	NA	NA	6,525	NA	NA	

<sup>1</sup> Beginning in 1981 excludes blending components.

<sup>2</sup> A negative number indicates an increase in stocks and a positive number indicates a decrease.

<sup>3</sup> Includes motor gasoline blending components. Ending stocks for 1973-1980 are totals as of December 31.

<sup>4</sup> Includes gasohol.

Totals may not equal sum of components due to independent rounding.

(<sup>5</sup>) = Less than 500 barrels. NA = Not available. R = Revised data.

\* See Explanatory Note 5.3.

\*\* Italics denote preliminary data. See Explanatory Note 2.7.

Notes: Beginning in January 1981, survey forms were modified. See Explanatory Note 4 on Changes for the effects on motor gasoline statistics.

Annual stock changes for 1975 and 1981 were calculated using expanded survey coverage.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

# Distillate Fuel Oil Supply and Disposition

		Supply				Disposition		Ending Stocks <sup>1</sup>
		Total Production	Imports	Stock Withdrawal <sup>2</sup>	Crude Used Directly	Exports	Product Supplied	
		Thousand Barrels per Day						
								Millions of Barrels
1973	AVERAGE	2,822	392	-115	2	9	3,092	196
1974	AVERAGE	2,669	289	-9	2	2	2,948	200
1975	AVERAGE	2,654	155	40	2	1	2,851	209
1976	AVERAGE	2,924	146	62	1	1	3,133	186
1977	AVERAGE	3,278	250	-176	1	1	3,352	250
1978	AVERAGE	3,167	173	93	1	3	3,432	216
1979	AVERAGE	3,153	193	-34	1	3	3,311	229
1980	AVERAGE	2,662	142	64	1	3	2,866	205
1981	January	2,989	273	836	11	(S)	4,109	179
	February	2,809	325	246	11	17	3,373	173
	March	2,484	147	264	9	(S)	2,904	164
	April	2,418	116	-9	10	3	2,532	165
	May	2,454	179	-232	10	(S)	2,411	172
	June	2,501	225	-270	9	(S)	2,464	180
	July	2,395	179	-204	10	2	2,378	186
	August	2,656	174	-450	8	(S)	2,388	200
	September	2,610	129	-235	10	1	2,513	207
	October	2,485	119	197	9	5	2,803	201
	November	2,716	124	36	11	6	2,880	200
	December	2,856	95	277	11	26	3,212	192
	AVERAGE	2,613	173	38	10	5	2,829	
1982	January	2,615	96	780	10	90	3,410	166
	February	2,447	130	689	11	90	3,187	147
	March	2,294	48	612	10	84	2,881	128
	April	2,357	59	631	13	64	2,996	109
	May	2,618	74	-184	10	75	2,444	114
	June	2,731	100	-335	10	55	2,450	125
	July	2,734	124	-761	11	24	2,084	148
	August	2,526	79	-346	10	40	2,228	159
	September	2,658	59	-77	12	139	2,514	161
	October*	R 2,837	R 97	R -290	8	66	R 2,586	R 170
	November**	2,885	80	-566	NA	NA	2,330	182
	AVERAGE	2,610	86	9	NA	NA	2,642	

<sup>1</sup> Ending stocks for 1973 - 1980 are totals as of December 31.

<sup>2</sup> A negative number indicates an increase in stocks and a positive number indicates a decrease. Totals may not equal sum of components due to independent rounding.

(S) = Less than 500 barrels per day. NA = Not available. R = Revised data.

\* See Explanatory Note 5.4.

\*\* Italics denote preliminary data. See Explanatory Note 2.7.

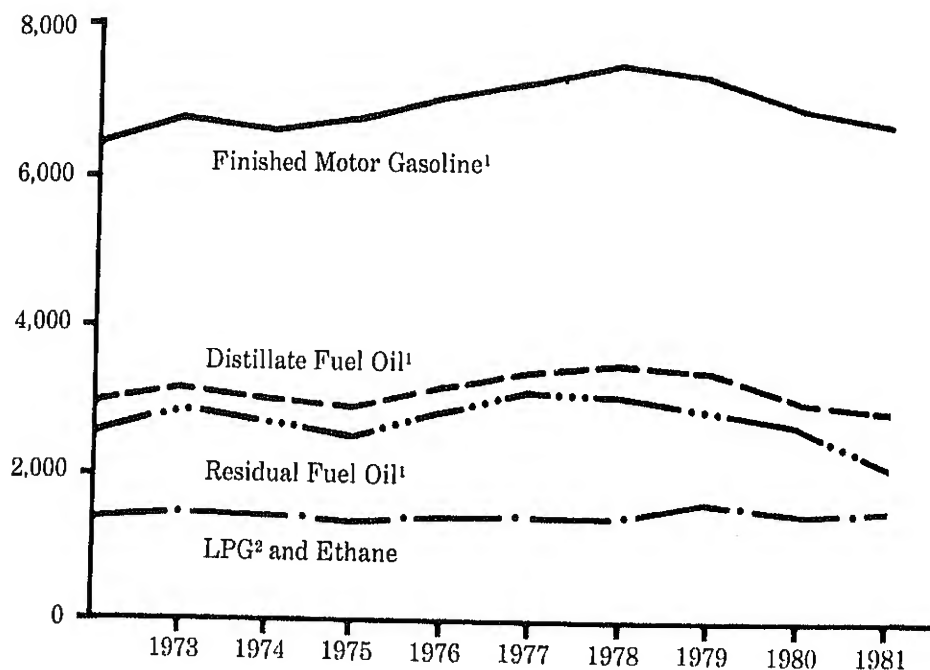
Note: Beginning in January 1981, survey forms were modified. See Explanatory Note 4 on Changes for the effects on Distillate Fuel Oil statistics.

Annual stock changes for 1975 and 1981 were calculated using expanded survey coverage.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

## Products Supplied, Annual (Thousand Barrels per Day)



<sup>1</sup>Figures for 1979 and 1980 recast to account for data system changes in 1981. See Explanatory Note 4.

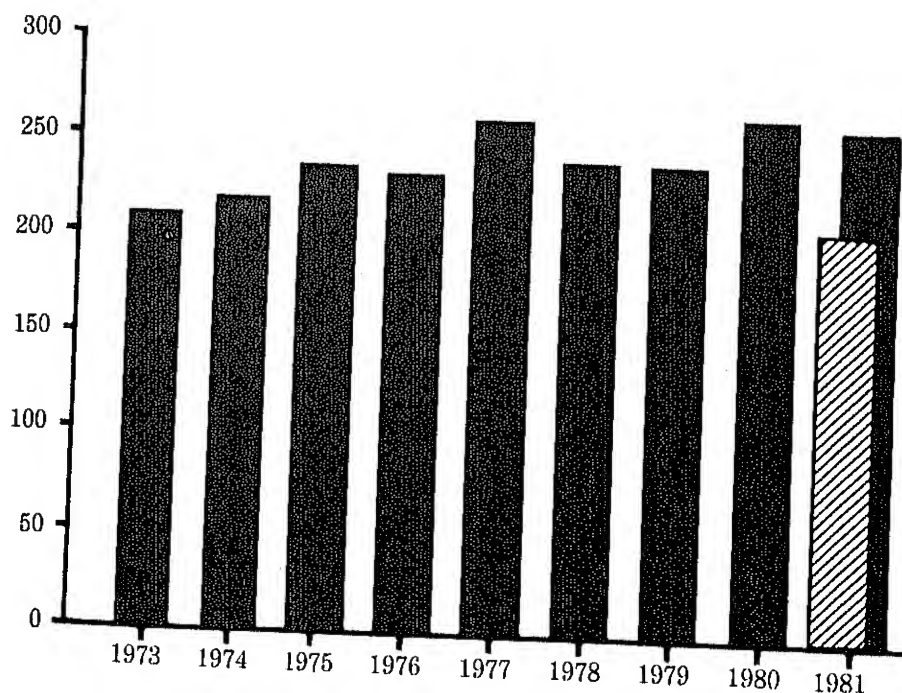
<sup>2</sup>Liquefied Petroleum Gases.

Source tables: "Finished Motor Gasoline Supply and Disposition," "Distillate Fuel Oil Supply and Disposition," "Residual Fuel Oil Supply and Disposition," "Liquefied Petroleum Gases and Ethane Supply and Disposition."

## Motor Gasoline<sup>1</sup> Ending Stocks, Annual (Millions of Barrels)

### Legend

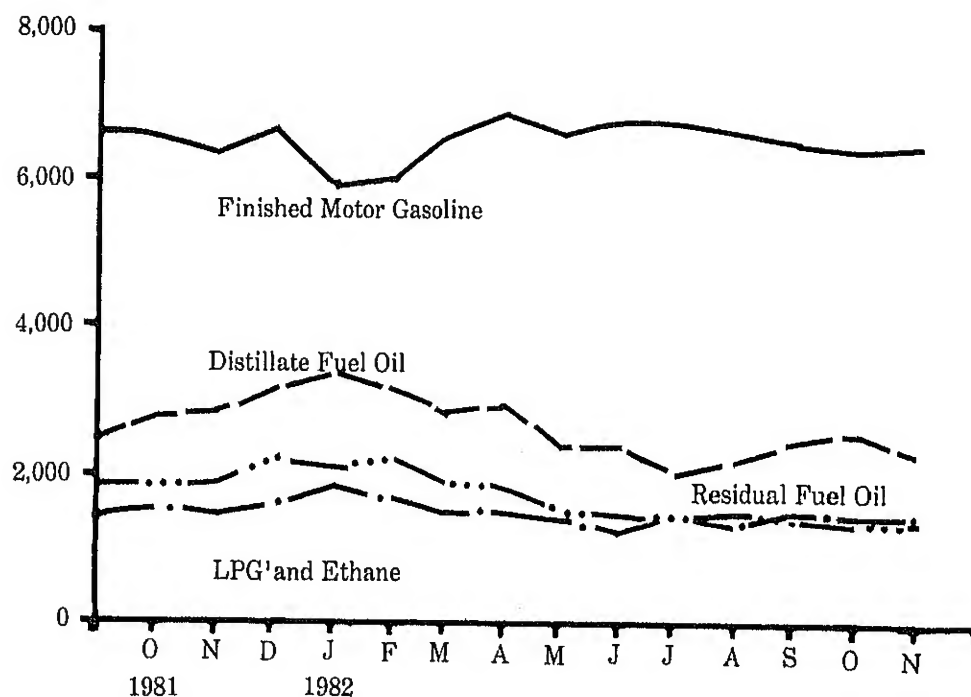
- Total
- ▨ Finished



<sup>1</sup>Includes finished motor gasoline blending components.

Source table: "Finished Motor Gasoline Supply and Disposition."

# **Products Supplied, Monthly** (Thousand Barrels per Day)



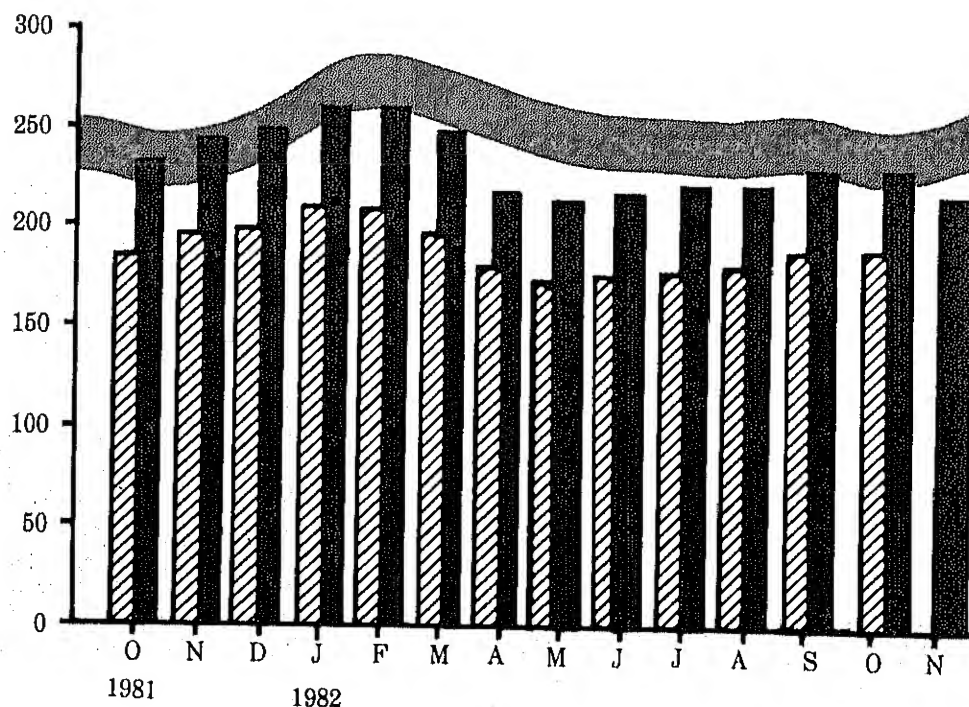
<sup>1</sup>Liquefied Petroleum Gases.

Source tables: "Finished Motor Gasoline Supply and Disposition," "Distillate Fuel Oil Supply and Disposition," "Residual Fuel Oil Supply and Disposition," "Liquefied Petroleum Gases and Ethane Supply and Disposition."

# **Motor Gasoline Ending Stocks, Monthly** (Millions of Barrels)

## **Legend**

- Total Motor Gasoline<sup>1</sup>
- Finished Motor Gasoline
- Average Stock Range<sup>2</sup>

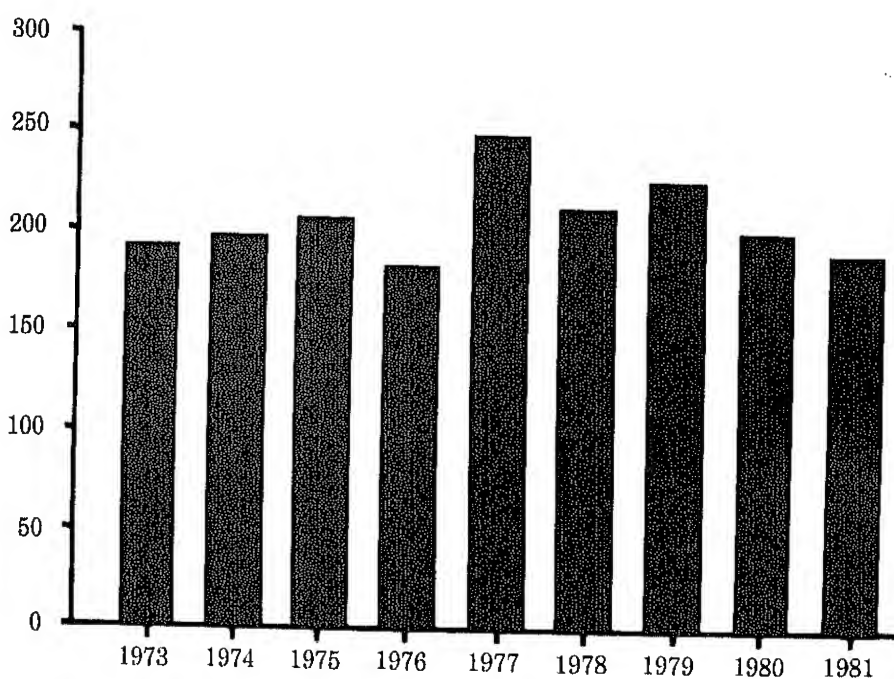


<sup>1</sup>Includes finished motor gasoline blending components.

<sup>2</sup>Average stock range for total motor gasoline based on 3 years of data. See Explanatory Note 2.5.

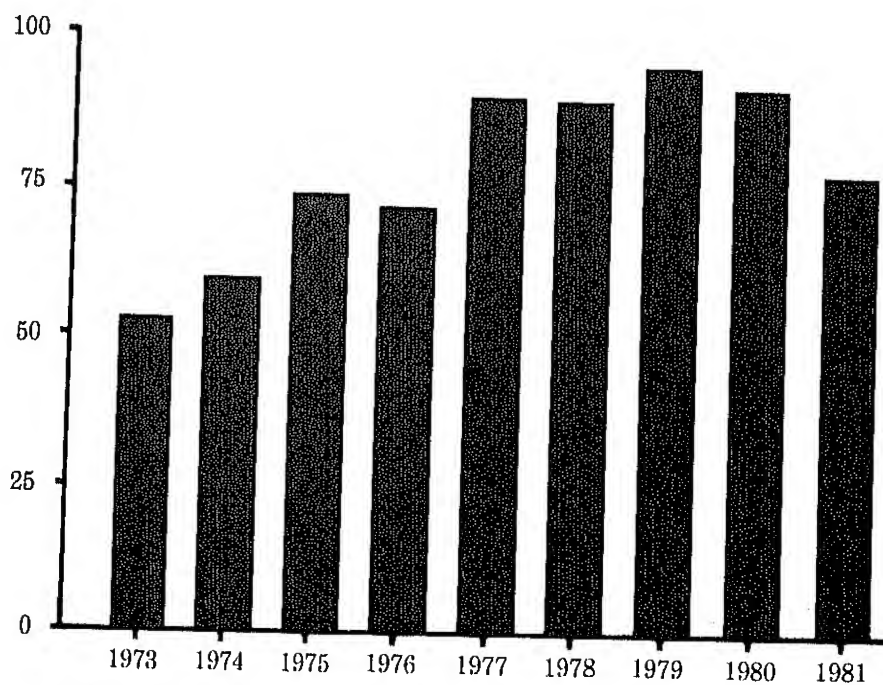
Source table: "Finished Motor Gasoline Supply and Disposition."

### Distillate Fuel Oil Ending Stocks, Annual (Millions of Barrels)



Source table: "Distillate Fuel Oil Supply and Disposition."


### Residual Fuel Oil Ending Stocks, Annual (Millions of Barrels)

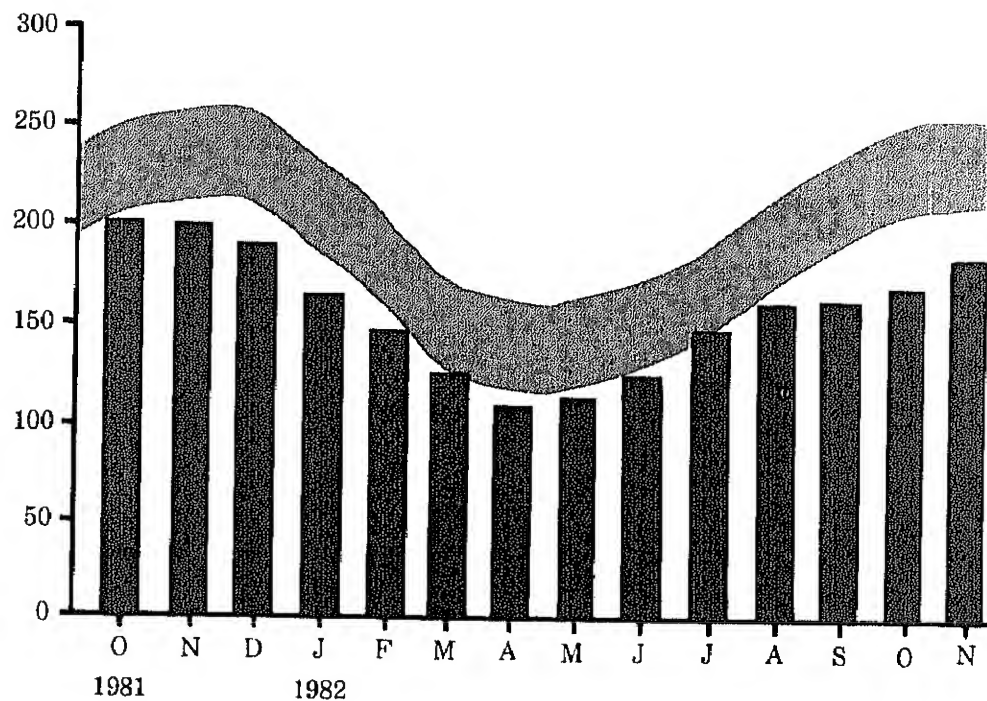


Source table: "Residual Fuel Oil Supply and Disposition."

## Distillate Fuel Oil Ending Stocks, Monthly (Millions of Barrels)

### Legend

 Average Stock Range<sup>1</sup>




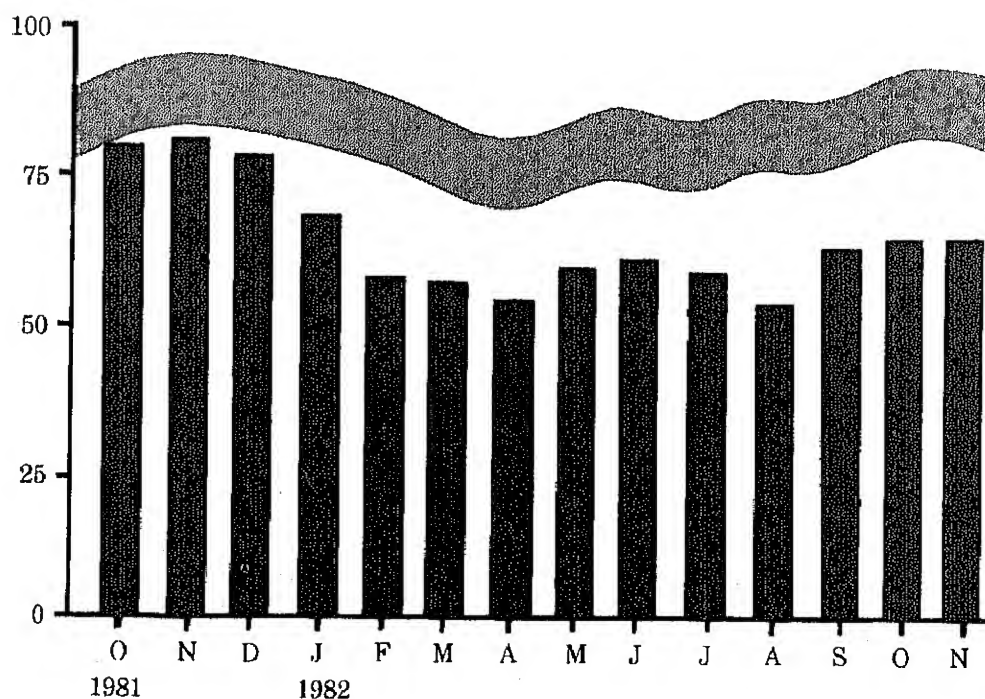
<sup>1</sup>Average stock range based on 3 years of data. See Explanatory Note 2.5.

Source table: "Distillate Fuel Oil Supply and Disposition."

## Residual Fuel Oil Ending Stocks, Monthly (Millions of Barrels)

### Legend

 Average Stock Range<sup>1</sup>



<sup>1</sup>Average stock range based on 3 years of data. See Explanatory Note 2.5.

Source table: "Residual Fuel Oil Supply and Disposition."

# Residual Fuel Oil Supply and Disposition

		Supply				Disposition		Ending Stocks <sup>1</sup>
		Total Production	Imports	Stock Withdrawal <sup>2</sup>	Crude Used Directly	Exports	Products Supplied	
		Thousand Barrels per Day						
								Millions of Barrels
1973	AVERAGE	971	1,853	5	17	23	2,822	53
1974	AVERAGE	1,070	1,587	-17	13	14	2,639	60
1975	AVERAGE	1,235	1,223	2	15	15	2,462	74
1976	AVERAGE	1,377	1,413	5	17	12	2,801	72
1977	AVERAGE	1,754	1,359	-48	13	6	3,071	90
1978	AVERAGE	1,667	1,355	-1	13	13	3,023	90
1979	AVERAGE	1,687	1,151	-15	12	9	2,826	96
1980	AVERAGE	1,580	939	10	12	33	2,508	92
1981	January	1,612	1,015	302	32	65	2,896	82
	February	1,565	954	150	44	125	2,588	78
	March	1,424	699	100	48	145	2,126	75
	April	1,320	584	66	49	151	1,868	73
	May	1,223	741	-170	49	25	1,817	78
	June	1,232	540	291	49	76	2,037	69
	July	1,174	830	2	48	82	1,971	69
	August	1,231	819	-179	50	69	1,852	75
	September	1,292	841	-176	51	126	1,882	80
	October	1,238	786	8	54	202	1,884	80
	November	1,227	880	-49	53	203	1,909	81
	December	1,329	916	110	52	157	2,250	78
	AVERAGE	1,321	800	37	48	118	2,088	
1982	January	1,183	821	328	53	235	2,150	68
	February	1,136	928	358	53	213	2,261	58
	March	1,121	910	26	53	197	1,912	57
	April	1,162	762	124	52	234	1,867	54
	May	1,127	738	-175	52	191	1,551	59
	June	1,077	643	-49	50	217	1,504	61
	July	1,029	576	51	49	239	1,466	59
	August	1,007	519	200	47	235	1,538	53
	September	1,007	871	-302	44	148	1,472	62
	October*	R 954	R 758	R -56	43	234	R 1,466	R 64
	November**	931	679	-57	NA	NA	1,399	64
	AVERAGE	1,066	744	39	NA	NA	1,886	

<sup>1</sup> Ending Stocks for 1973-1980 are totals as of December 31.

<sup>2</sup> A negative number indicates an increase in stocks and a positive number indicates a decrease. Totals may not equal sum of components due to independent rounding.

NA = Not available. R = Revised data.

\* See Explanatory Note 5.4.

\*\* Italics denote preliminary data. See Explanatory Note 2.7.

Notes: Beginning in January 1981, survey forms were modified.

See Explanatory Note 4 on changes for the effects on residual fuel oil statistics.

Annual stock changes for 1975 and 1981 were calculated using expanded survey coverage.

Geographic Coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

# Liquefied Petroleum Gases and Ethane Supply and Disposition

		Supply			Disposition			Ending Stocks <sup>1</sup>
		Total Production	Imports	Stock Withdrawal <sup>2</sup>	Refinery Inputs	Exports	Product Supplied	
		Thousand Barrels per Day						Millions of Barrels
1973	AVERAGE	1,600	132	-35	220	27	1,449	99
1974	AVERAGE	1,565	123	-38	220	25	1,406	113
1975	AVERAGE	1,527	112	-35	246	26	1,333	125
1976	AVERAGE	1,535	130	24	260	25	1,404	116
1977	AVERAGE	1,566	161	-55	233	18	1,422	136
1978	AVERAGE	1,537	123	12	239	20	1,413	132
1979	AVERAGE	1,556	217	70	236	15	1,592	111
1980	AVERAGE	1,535	216	-27	233	21	1,469	120
1981	January	1,617	306	363	352	21	1,913	117
	February	1,593	327	173	303	21	1,769	112
	March	1,551	260	-4	257	20	1,530	112
	April	1,586	214	-236	231	26	1,308	119
	May	1,587	189	-258	220	19	1,279	127
	June	1,567	206	-208	237	24	1,304	133
	July	1,507	213	-258	215	17	1,229	141
	August	1,592	195	-242	235	149	1,160	149
	September	1,622	199	-75	287	21	1,438	151
	October	1,593	287	72	320	76	1,556	149
	November	1,571	280	86	383	58	1,495	146
	December	1,468	255	379	428	50	1,624	135
	AVERAGE	1,571	244	-18	289	42	1,466	
1982	January	1,546	314	480	398	67	1,873	122
	February	1,476	291	310	327	51	1,699	114
	March	1,523	223	145	289	74	1,528	109
	April	1,566	188	107	257	77	1,527	106
	May	1,583	186	-61	235	43	1,431	108
	June	1,571	192	-109	262	106	1,286	111
	July	1,556	227	-5	253	37	1,487	111
	August	1,591	125	-44	254	61	1,357	112
	September	1,606	247	33	273	85	1,528	111
	October*	1,582	194	92	306	81	1,481	109
	AVERAGE	1,561	218	94	285	68	1,519	

<sup>1</sup> Ending stocks for 1973 - 1980 are totals as of December 31.

<sup>2</sup> A negative number indicates an increase in stocks and a positive number indicates a decrease. Totals may not equal sum of components due to independent rounding.

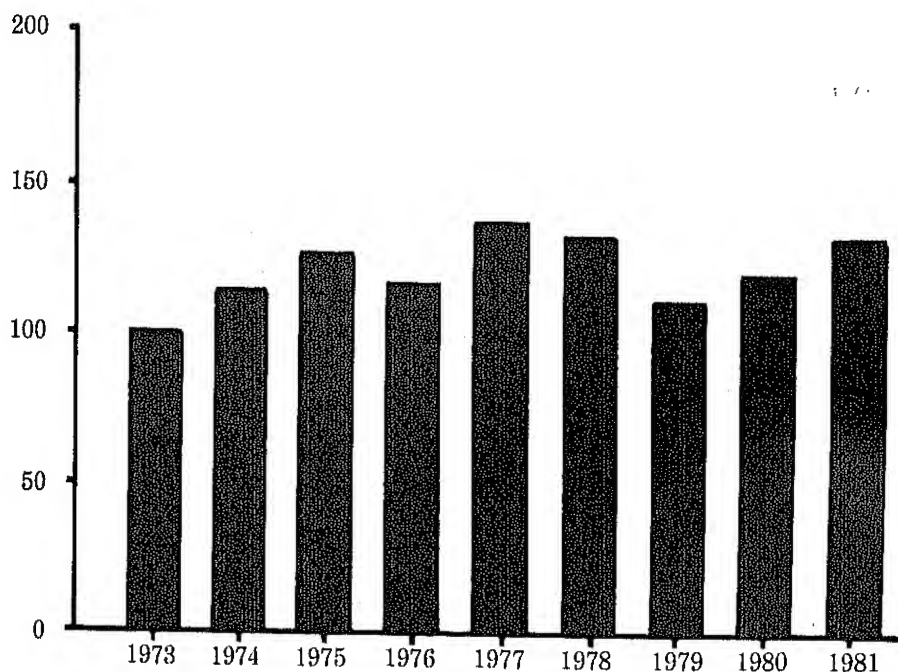
\* See Explanatory Note 5.5.

Note: Annual stock changes for 1975 and 1981 were calculated using expanded survey coverage. Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

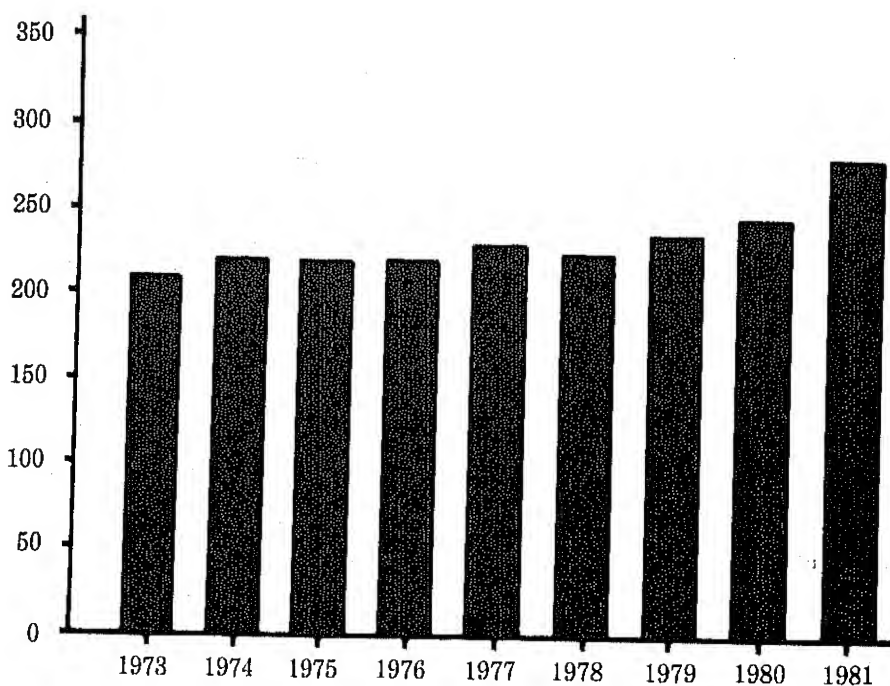


**Liquefied Petroleum Gases and Ethane Ending Stocks, Annual**  
(Millions of Barrels)



Source table: "Liquefied Petroleum Gases and Ethane Supply and Disposition."

**Other Petroleum Products<sup>1</sup> Ending Stocks, Annual**  
(Millions of Barrels)




<sup>1</sup>Includes natural gasoline and isopentane, unfinished oils, gasoline blending components, jet fuels, kerosene, lubricants, and asphalt. Some gasoline blending components not included prior to 1981.

Source table: "Other Petroleum Products Supply and Disposition."

## Liquefied Petroleum Gases and Ethane Ending Stocks, Monthly (Millions of Barrels)

### Legend

 Average Stock Range<sup>1</sup>


<sup>1</sup>Average stock range based on 3 years of data. See Explanatory Note 2.5.

Source table: "Liquefied Petroleum Gases and Ethane Supply and Disposition."



## Other Petroleum Products<sup>1</sup> Endings Stocks, Monthly (Millions of Barrels)

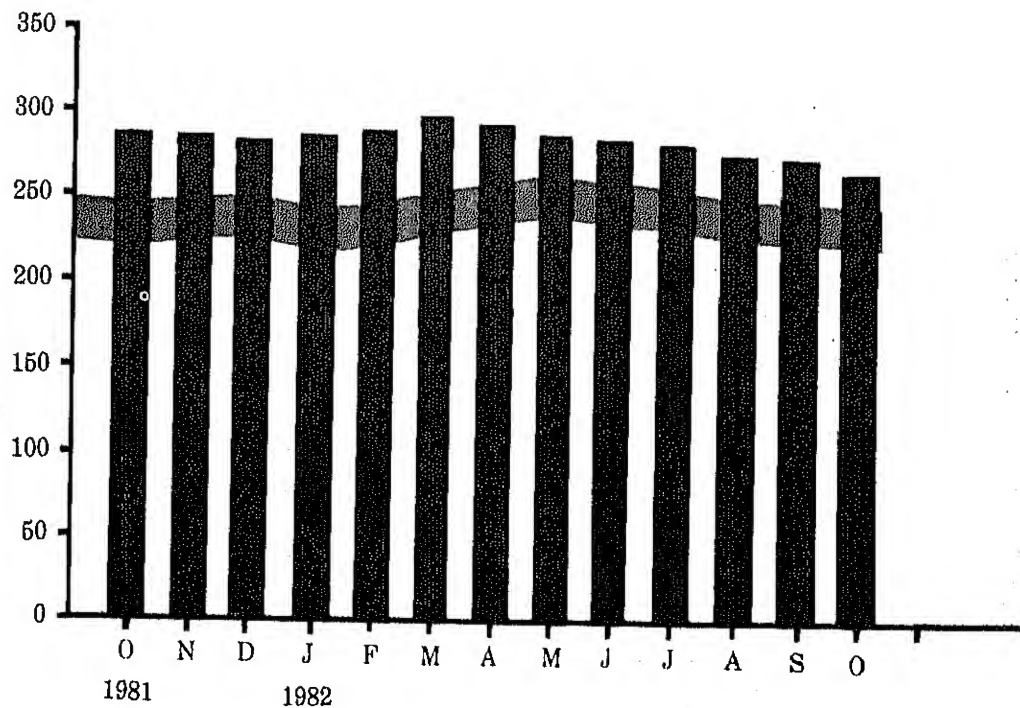
### Legend

 Average Stock Range<sup>2</sup>

<sup>1</sup>Includes natural gasoline and isopentane, unfinished oils, gasoline blending components, jet fuels, kerosene, lubricants, and asphalt.

<sup>2</sup>Average stock range based on 8 years of data. See Explanatory Note 2.5.

Source table: "Other Petroleum Products Supply and Disposition."



# Other Petroleum Products<sup>1</sup> Supply and Disposition

		Supply			Disposition			Ending Stocks <sup>2</sup>
		Total Production	Imports	Stock Withdrawal <sup>3</sup>	Refinery Inputs	Exports	Products Supplied	
		Thousand Barrels per Day						Millions of Barrels
1973	AVERAGE	3,693	502	-9	750	166	3,270	208
1974	AVERAGE	3,558	432	-28	665	174	3,123	218
1975	AVERAGE	3,424	277	-2	537	160	3,002	219
1976	AVERAGE	3,643	206	-5	524	175	3,145	220
1977	AVERAGE	3,912	205	-27	514	165	3,410	230
1978	AVERAGE	4,048	166	14	492	167	3,568	225
1979	AVERAGE	4,153	195	-37	352	209	3,749	238
1980	AVERAGE	3,956	210	-23	311	198	3,634	247
1981	January	3,821	162	80	851	132	3,081	296
	February	3,723	182	-200	538	208	2,958	302
	March	3,722	230	-55	642	210	3,043	304
	April	3,711	230	24	733	192	3,040	303
	May	3,892	229	-58	594	238	3,231	305
	June	3,925	218	-29	656	197	3,261	306
	July	3,852	149	284	791	212	3,282	297
	August	3,876	276	-33	676	219	3,225	298
	September	3,718	285	215	883	176	3,159	291
	October	3,503	241	193	710	227	3,000	285
	November	3,579	262	33	784	154	2,935	284
	December	3,543	243	71	805	223	2,829	282
	AVERAGE	3,739	226	46	723	199	3,088	
1982	January	3,181	240	-102	602	180	2,536	284
	February	3,364	260	-116	646	138	2,724	287
	March	3,485	241	-204	734	161	2,627	294
	April	3,394	287	91	801	204	2,767	291
	May	3,296	309	198	823	210	2,769	285
	June	3,481	315	115	815	216	2,879	281
	July	3,578	391	15	862	187	2,935	281
	August	3,519	329	256	841	202	3,060	273
	September	3,442	365	74	767	213	2,901	271
	October*	3,472	367	223	901	266	2,896	264
	AVERAGE	3,422	311	56	780	198	2,810	

<sup>1</sup> Includes natural gasoline and isopentane, unfractionated stream, plant condensate, other liquids; and all finished petroleum products except finished motor gasoline, distillate fuel oil, and residual fuel oil.

<sup>2</sup> Ending Stocks for 1973-1980 are totals as of December 31.

<sup>3</sup> A negative number indicates an increase in stocks and a positive number indicates a decrease. Totals may not equal sum of components due to independent rounding.

\* See Explanatory Note 5.6.

Note: Annual stock changes for 1975 and 1981 were calculated using expanded survey coverage. Geographic Coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

# Crude Oil and Petroleum Product Imports from OPEC Sources

	Algeria	Libya	Saudi Arabia	United Arab Emirates	Indonesia	Iran	Nigeria	Venezuela	Other OPEC <sup>1</sup>	Total OPEC	Total Arab OPEC <sup>2</sup>
Thousand Barrels per Day											
<b>1973</b>											
<b>AVERAGE</b>	136	164	486	71	213	223	459	1,135	106	2,993	915
<b>1974</b>											
<b>AVERAGE</b>	190	4	461	74	300	469	713	979	88	3,280	752
<b>1975</b>											
<b>AVERAGE</b>	282	232	715	117	390	280	762	702	122	3,601	1,383
<b>1976</b>											
<b>AVERAGE</b>	432	453	1,230	254	539	298	1,025	700	134	5,066	2,424
<b>1977</b>											
<b>AVERAGE</b>	559	723	1,380	335	541	535	1,143	690	287	6,193	3,185
<b>1978</b>											
<b>AVERAGE</b>	649	654	1,144	385	573	555	919	645	226	5,751	2,963
<b>1979</b>											
<b>AVERAGE</b>	636	658	1,356	281	420	304	1,080	690	212	5,637	3,056
<b>1980</b>											
<b>AVERAGE</b>	488	554	1,261	172	348	9	857	481	130	4,300	2,551
<b>1981</b>											
January	341	500	1,284	93	424	0	908	549	27	4,127	2,219
February	381	468	1,122	93	406	0	866	463	92	3,891	2,064
March	352	485	1,027	47	328	0	771	360	54	3,425	1,912
April	263	485	1,034	68	307	0	812	237	39	3,245	1,867
May	393	443	933	17	297	0	664	331	124	3,203	1,796
June	356	380	865	60	367	0	528	248	118	2,922	1,703
July	333	251	1,073	80	340	0	651	466	38	3,233	1,757
August	348	274	1,082	61	377	0	321	523	84	3,070	1,765
September	336	154	1,477	96	371	0	323	359	149	3,264	2,063
October	242	147	1,342	90	427	0	412	389	172	3,220	1,820
November	210	132	1,270	112	353	0	517	535	56	3,184	1,724
December	176	122	1,045	158	400	0	684	411	132	3,129	1,502
<b>AVERAGE</b>	311	319	1,129	81	366	0	620	406	90	3,323	1,848
<b>1982</b>											
January	254	161	877	87	273	0	662	376	128	2,818	1,378
February	139	92	692	79	236	0	579	347	102	2,267	1,044
March	91	37	555	155	200	0	503	399	91	2,032	860
April	85	0	479	122	215	0	427	411	79	1,818	707
May	179	0	601	116	236	0	211	414	54	1,811	897
June	93	0	593	94	215	72	537	361	110	2,075	799
July	122	0	644	123	327	69	910	349	95	2,640	927
August	170	0	489	133	272	27	542	288	134	2,057	807
September	162	0	432	57	191	21	479	514	52	1,907	659
October	249	7	494	61	227	108	291	496	96	2,029	810
<b>AVERAGE</b>	155	29	585	103	240	30	514	396	94	2,146	889

<sup>1</sup> Includes Ecuador, Gabon, Iraq, Kuwait, and Qatar.

<sup>2</sup> Includes Algeria, Libya, Saudi Arabia, United Arab Emirates, Iraq, Kuwait, and Qatar.

Totals may not equal sum of components due to independent rounding.

Note: Beginning in October 1977, Strategic Petroleum Reserve Imports are included.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

## Crude Oil and Petroleum Product Imports from Non-OPEC Sources

	Bahamas	Canada	Mexico	Netherlands Antilles	Trinidad and Tobago	United Kingdom	Puerto Rico <sup>1</sup>	Virgin Islands <sup>1</sup>	Other <sup>2</sup>	Total
	Thousand Barrels per Day									
<b>1973</b>										
<b>AVERAGE</b>	174	1,325	16	585	255	15	99	329	465	3,263
<b>1974</b>										
<b>AVERAGE</b>	164	1,070	8	511	251	8	90	391	340	2,832
<b>1975</b>										
<b>AVERAGE</b>	152	846	71	332	242	14	90	406	300	2,454
<b>1976</b>										
<b>AVERAGE</b>	118	599	87	275	274	31	88	422	353	2,247
<b>1977</b>										
<b>AVERAGE</b>	171	517	179	211	289	126	105	466	550	2,614
<b>1978</b>										
<b>AVERAGE</b>	160	467	318	229	253	180	94	429	484	2,613
<b>1979</b>										
<b>AVERAGE</b>	147	538	439	231	190	202	92	431	548	2,819
<b>1980</b>										
<b>AVERAGE</b>	78	455	533	225	176	176	88	388	491	2,609
<b>1981</b>										
January	39	543	401	198	150	233	89	494	552	2,701
February	84	546	437	227	163	271	46	481	626	2,881
March	74	472	488	227	93	263	45	370	571	2,603
April	68	412	418	198	139	402	40	365	380	2,423
May	122	365	522	213	105	368	58	344	474	2,573
June	51	353	538	196	124	397	67	262	525	2,513
July	77	382	384	212	178	553	50	206	541	2,583
August	69	378	489	255	123	592	68	184	539	2,698
September	111	423	708	163	169	528	72	265	661	3,100
October	63	449	669	161	121	351	60	303	562	2,739
November	63	547	628	168	108	253	76	294	421	2,557
December	70	501	587	148	125	280	73	367	563	2,714
<b>AVERAGE</b>	74	447	522	197	133	375	62	327	534	2,672
<b>1982</b>										
January	28	509	426	179	106	346	62	334	425	2,415
February	50	533	489	221	120	132	38	354	487	2,424
March	43	435	503	189	118	293	62	307	479	2,429
April	67	357	467	180	166	247	36	266	682	2,468
May	76	416	767	152	95	516	47	302	603	2,974
June	32	462	797	141	129	539	58	322	673	3,153
July	30	527	783	158	111	433	38	369	674	3,122
August	68	435	854	145	106	520	24	320	627	3,099
September	92	484	897	195	89	631	51	270	744	3,463
October	45	456	682	148	109	666	52	262	783	3,202
<b>AVERAGE</b>	53	461	668	170	115	435	47	310	618	2,877

<sup>1</sup> U.S. Possessions.

<sup>2</sup> Includes all Non-OPEC countries except those shown above.

Totals may not equal sum of components due to independent rounding.

Note: Beginning in October 1977, Strategic Petroleum Reserve Imports are included.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

# Sources

- 1973 through 1976: Bureau of Mines, U.S. Department of the Interior, "Petroleum Statement, Annual" and PAD Districts Supply/Demand, Annual," Mineral Industry Surveys.
- 1977 through 1980: Energy Information Administration, U.S. Department of Energy, "Monthly Petroleum Statistics Report," (unleaded gasoline category).
- 1977 through 1980: Energy Information Administration, U.S. Department of Energy, "Petroleum Statement, Annual" and "PAD Districts Supply/Demand, Annual," "Energy Data Reports.
- January 1981 through December 1981: Energy Information Administration, U.S. Department of Energy, "Petroleum Supply Annual."
- January 1982 through October 1982: Detailed statistics in this issue. (See Explanatory Notes 5.1 through 5.6).
- November 1982: Estimates based on EIA weekly data (except domestic crude oil production). See Explanatory Note 2.2).
- January 1982 through November 1982: Domestic crude oil production estimate based on historical statistics from State Conservation Agencies and the U.S. Geological Survey. (See Explanatory Note 2.7).



## Detailed Statistics







Table 1. U.S. Petroleum Balance, October 1982

	Current Month		Year-to-Date	
	Thousand Barrels	Thousand Barrels per Day	Thousand Barrels	Thousand Barrels per Day
Crude Oil (Including Lease Condensate)				
Field Production				
(1) Alaska .....	E 51,975	1,677	E 517,220	1,701
(2) Lower 48 States .....	E 216,981	6,999	E 2,118,582	6,989
(3) Total U.S. ....	E 268,956	8,676	E 2,635,802	8,670
Net Imports				
(4) Imports (Gross Excluding SPR) .....	106,019	3,420	1,004,592	3,305
(5) SPR Imports .....	6,702	216	50,975	168
(6) Exports .....	8,384	270	72,450	238
(7) Imports (Net Including SPR) .....	104,338	3,366	983,117	3,234
Other Sources				
(8) SPR Withdrawal (+) or Addition (-) .....	-6,708	-216	-54,251	-178
(9) Other Stock Withdrawal (+) or Addition (-) .....	-10,779	-348	12,762	42
(10) Used Directly and Losses .....	-1,628	-53	-19,247	-63
(11) Unaccounted for <sup>1</sup> .....	10,058	324	31,063	102
(12) Total Other Sources .....	-9,057	-292	-29,673	-98
(13) Crude Input to Refineries .....	364,237	11,750	3,589,246	11,807
(13) = (3) + (7) + (12)				
Natural Gas Plant Liquids (NGPL)				
(14) Field Production .....	47,730	1,540	467,374	1,537
(15) Imports <sup>2</sup> .....	1,449	47	6,344	21
(16) Stock Withdrawal (+) or Addition (-) <sup>2</sup> .....	1,591	51	4,129	14
(17) Total NGPL Supply .....	50,770	1,638	477,848	1,572
Other Liquids				
Unfinished Oils and Gasoline Blending Components, Total				
(18) Stock Withdrawal (+) or Addition (-) .....	4,737	153	5,615	18
(19) Imports .....	6,314	204	49,541	163
(20) Other Hydrocarbons and Alcohol New Supply (Field Production) .....	2,091	67	16,086	53
(21) Refinery Processing Gain <sup>1</sup> .....	16,580	535	156,970	516
(22) Crude Used Directly .....	1,583	51	18,285	60
(23) Total Other Liquids .....	31,315	1,010	246,497	811
(23) = (18) through (22)				
(24) Total Production of Products <sup>3</sup> .....	446,321	14,397	4,313,590	14,189
(24) = (13) + (17) + (23)				
Net Imports of Refined Products <sup>3</sup>				
(25) Imports (Gross) .....	41,652	1,344	415,519	1,367
(26) Exports .....	20,507	662	174,825	575
(27) Imports (Net) .....	21,146	682	240,694	792
(28) Total New Supply of Products .....	467,467	15,080	4,554,285	14,981
(28) = (24) + (27)				
(29) Refined Products Stock Withdrawal (+) or Addition (-) <sup>3</sup> .....	-8,044	-259	81,657	269
(30) Total Petroleum Products Supplied for Domestic Use .....	459,423	14,820	4,635,942	15,250
(30) = (28) + (29)				
(31) Finished Motor Gasoline .....	198,133	6,391	1,986,470	6,534
(32) Naphtha-Type Jet Fuel .....	5,938	192	62,844	207
(33) Kerosene-Type Jet Fuel .....	23,882	770	241,372	794
(34) Kerosene .....	4,131	133	36,789	121
(35) Distillate Fuel Oil .....	80,171	2,586	814,053	2,678
(36) Residual Fuel Oil .....	45,435	1,466	520,784	1,713
(37) Liquefied Petroleum Gases and Ethane .....	45,922	1,481	459,313	1,511
(38) Other .....	64,220	2,072	614,088	2,020
(39) Total Reclassified <sup>1</sup> .....	-8,408	-271	-99,769	-328
(40) Total Product Supplied .....	459,423	14,820	4,635,943	15,250
(40) = (31) through (39)				
Ending Stocks, All Oils				
(41) Crude Oil and Lease Condensate (Excluding SPR) .....	350,702	--	350,702	--
(42) Strategic Petroleum Reserve (SPR) .....	284,592	--	284,592	--
(43) Unfinished Oils .....	113,338	--	113,338	--
(44) Gasoline Blending Components .....	42,826	--	42,826	--
(45) Natural Gasoline and Unfractionated Stream .....	11,390	--	11,390	--
(46) Finished Refined Products <sup>3</sup> .....	630,888	--	630,888	--
(47) Total Stocks .....	1,433,736	--	1,433,736	--

<sup>1</sup> A balancing item.<sup>2</sup> Includes isopentane, natural gasoline, unfractionated stream, and plant condensate only.<sup>3</sup> For products included see Explanatory Note 5.7.

E = Estimated.

-- Not Applicable.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1, 2, and 5.7.

Table 2. Supply and Disposition of Crude Oil and Petroleum Products, October 1982  
(Thousands of Barrels)

(Thousands of barrels)										
Commodity	Supply					Disposition				Ending Stocks
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil <sup>1</sup>	Crude Used Directly and Losses <sup>2</sup>	Refinery Inputs	Exports	Products Supplied	
Crude Oil (including lease condensate)	268,956	0	112,721	-17,487	10,058	-1,628	364,237	8,384	0	635,294
Natural Gas Plant Liquids and LRGs	47,397	7,993	7,473	4,455	0	0	15,876	2,526	48,916	120,013
Natural Gasoline and Isopentane	6,067	0	1,390	675	0	0	5,155	0	2,977	6,374
Unfractionated Stream	-888	0	0	903	0	0	0	0	15	3,502
Plant Condensate	1,168	0	59	12	0	0	1,239	0	1	1,514
Liquefied Petroleum Gases and Ethane	41,049	7,993	6,024	2,864	0	0	9,482	2,526	45,922	108,623
Ethane	8,915	161	1,105	-175	0	0	33	(9)	9,973	5,160
Propane	13,840	7,514	2,466	2,152	0	0	99	1,174	24,699	61,685
Butane	6,968	116	2,346	1,685	0	0	6,085	1,352	3,676	22,735
Butane-Propane Mixtures	182	90	0	-450	0	0	247	0	-445	1,359
Ethane-Propane Mixtures	7,621	0	107	179	0	0	0	0	7,907	8,352
Isobutane	3,545	112	0	-527	0	0	3,018	0	112	9,331
Other Liquids	2,091	0	6,314	4,737	0	0	21,550	0	-8,408	156,164
Other Hydrocarbons and Alcohol	2,091	0	0	18	0	0	2,109	0	0	191
Unfinished Oils	0	0	5,070	4,440	0	0	15,378	0	-5,868	113,338
Motor Gasoline Blending Components	0	0	1,244	234	0	0	4,044	0	-2,566	42,258
Aviation Gasoline Blending Components	0	0	0	45	0	0	19	0	26	377
Finished Petroleum Products	332	410,260	35,628	-10,908	0	1,583	0	17,980	418,916	522,265
Finished Motor Gasoline	45	193,808	5,494	-762	0	0	0	452	198,133	192,095
Finished Leaded Motor Gasoline	45	91,949	3,731	-1,308	0	0	0	452	93,964	94,744
Finished Unleaded Motor Gasoline	0	101,778	1,763	560	0	0	0	0	104,101	97,301
Gasohol	0	81	0	-14	0	0	0	0	67	50
Finished Aviation Gasoline	51	706	1	-12	0	0	0	0	745	2,212
Naphtha-Type Jet Fuel	0	5,880	91	-32	0	0	0	(9)	5,938	6,390
Kerosene-Type Jet Fuel	0	24,506	534	-1,123	0	0	0	35	23,882	34,496
Kerosene	3	4,007	497	-376	0	0	0	1	4,131	10,220
Distillate Fuel Oil	2	87,950	3,014	-8,993	0	240	0	2,042	80,171	170,187
Residual Fuel Oil	0	29,583	23,508	-1,749	0	1,343	0	7,249	45,435	63,574
Naphtha < 400 Deg. for Petro. Feed. Use	0	4,298	759	421	0	0	0	95	5,382	1,810
Other Oils > 400 Deg. for Petro. Feed. Use	0	7,944	0	-326	0	0	0	873	6,745	2,206
Special Naphthas	44	1,601	654	-144	0	0	0	96	2,059	3,802
Lubricants	0	4,394	241	9	0	0	0	563	4,081	12,644
Waxes	0	392	118	17	0	0	0	18	509	744
Petroleum Coke	0	12,260	0	378	0	0	0	6,520	6,118	5,842
Asphalt	0	13,628	146	1,457	0	0	0	13	15,218	13,127
Road Oil	0	2	0	13	0	0	0	0	15	52
Still Gas	0	16,802	0	0	0	0	0	0	16,802	0
Miscellaneous Products	188	2,499	573	315	0	0	0	23	3,551	2,865
Total	318,777	418,253	162,137	-19,203	10,058	-45	401,663	28,890	459,423	1,433,736

<sup>1</sup> Unaccounted for crude oil is a balancing item.

<sup>2</sup> Total equals refinery fuel use and loss.

(s) Less than 500 barrels.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 3. Year-to-Date Supply and Disposition Statistics of Crude Oil and Petroleum Products, January - October 1982  
(Thousands of Barrels)

Commodity	Supply					Disposition			Ending Stocks	
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil <sup>1</sup>	Crude Used Directly and Losses <sup>2</sup>	Refinery Inputs	Exports		Products Supplied
Crude Oil (including lease condensate)	E 2,635,802	0	1,055,567	-41,489	31,063	-19,247	3,589,246	72,450	0	635,294
Natural Gas Plant Liquids and LRGs	462,834	82,880	72,648	30,157	0	0	152,919	20,742	474,858	120,013
Natural Gasoline and Isopentane	61,678	0	4,836	3,019	0	0	54,302	0	15,231	6,374
Unfractionated Stream	-782	0	0	1,050	0	0	8	0	260	3,502
Plant Condensate	10,409	0	1,509	60	0	0	11,924	0	53	1,514
Liquefied Petroleum Gases and Ethane	391,528	82,880	66,303	26,028	0	0	86,885	20,742	459,313	108,623
Ethane	83,409	1,371	14,427	-245	0	0	1,310	1	97,650	5,160
Propane	140,373	76,428	18,246	13,872	0	0	1,192	9,923	237,805	61,685
Butane	67,080	3,682	17,464	4,519	0	0	49,747	10,818	32,181	22,735
Butane-Propane Mixtures	1,243	1,356	6,904	393	0	0	1,476	0	8,420	1,359
Ethane-Propane Mixtures	65,787	0	9,263	8,082	0	0	46	0	83,085	8,352
Isobutane	33,636	43	0	-593	0	0	32,914	0	173	9,331
Other Liquids	16,086	0	49,541	5,615	0	0	171,011	0	-99,769	156,164
Other Hydrocarbons and Alcohol	16,086	0	0	17	0	0	16,103	0	0	191
Unfinished Oils	0	0	38,328	-1,990	0	0	100,994	0	-64,656	113,338
Motor Gasoline Blending Components	0	0	11,212	7,274	0	0	54,419	0	-35,933	42,258
Aviation Gasoline Blending Components	0	0	0	314	0	0	-505	0	819	377
Finished Petroleum Products	4,542	3,987,266	349,216	55,629	0	18,285	0	154,083	4,260,855	522,265
Finished Motor Gasoline	474	1,925,109	56,157	11,374	0	0	0	6,644	1,986,470	192,095
Finished Leaded Motor Gasoline	455	912,197	35,996	13,341	0	0	0	6,644	955,344	94,744
Finished Unleaded Motor Gasoline	20	1,011,916	20,161	-1,976	0	0	0	0	1,030,121	97,301
Gasohol	0	996	0	9	0	0	0	0	1,005	50
Finished Aviation Gasoline	607	7,166	2	521	0	0	0	0	8,296	2,212
Naphtha-Type Jet Fuel	0	60,783	1,682	664	0	0	0	285	62,844	6,390
Kerosene-Type Jet Fuel	2	235,824	6,860	-485	0	0	0	829	241,372	34,496
Kerosene	36	33,223	3,022	822	0	0	0	314	36,789	10,220
Distillate Fuel Oil	24	785,223	26,226	21,354	0	3,200	0	21,974	814,053	170,187
Residual Fuel Oil	0	328,270	228,213	14,418	0	15,085	0	65,202	520,784	63,574
Naphtha < 400 Deg. for Petro. Feed	0	46,059	16,185	659	0	0	0	1,246	61,656	1,810
Other Oils > 400 Deg. for Petrochem. Feedstock	0	82,051	0	-456	0	0	0	6,046	75,549	2,206
Special Naphthas	783	15,924	5,807	163	0	0	0	1,686	20,991	3,802
Lubricants	0	43,562	2,551	1,660	0	0	0	5,179	42,594	12,644
Waxes	0	4,240	354	-74	0	0	0	213	4,307	744
Petroleum Coke	0	123,294	0	-1,340	0	0	0	43,800	78,154	5,842
Asphalt	0	102,351	1,479	6,460	0	0	0	277	110,013	13,127
Road Oil	0	577	2	-26	0	0	0	0	553	52
Still Gas	0	169,586	0	0	0	0	0	0	169,586	0
Miscellaneous Products	2,617	24,024	676	-85	0	0	0	388	26,844	2,865
Total	3,119,264	4,070,146	1,526,972	49,912	31,063	-962	3,913,176	247,275	4,635,943	1,433,736

1 Unaccounted for crude oil is a balancing item.

2 Total equals refinery fuel use and loss.

E Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 4. Daily Average Supply and Disposition of Crude Oil and Petroleum Products, October 1982  
(Thousand Barrels per Day)

Commodity	Supply					Disposition			
	Field Production	Refinery Production	Imports	Stock Withdrawal(+) Addition(-)	Unaccounted For Crude Oil <sup>1</sup>	Crude Used Directly and Losses <sup>2</sup>	Refinery Inputs	Exports	Products Supplied
<b>Crude Oil (including lease condensate)</b>	E 8,676	0	3,636	-564	324	-53	11,750	270	0
<b>Natural Gas Plant Liquids and LRGs</b>	1,529	258	241	144	0	0	512	81	1,578
Natural Gasoline and Isopentane	196	0	45	22	0	0	166	0	96
Unfractionated Stream	-29	0	0	29	0	0	0	0	(s)
Plant Condensate	38	0	2	(s)	0	0	40	0	(s)
Liquefied Petroleum Gases and Ethane	1,324	258	194	92	0	0	306	81	1,481
Ethane	288	5	36	-6	0	0	1	(s)	322
Propane	446	242	80	69	0	0	3	38	797
Butane	225	4	76	54	0	0	196	44	119
Butane-Propane Mixtures	5	3	0	-15	0	0	8	0	-14
Ethane-Propane Mixtures	246	0	3	6	0	0	0	0	255
Isobutane	114	4	0	-17	0	0	97	0	4
<b>Other Liquids</b>	67	0	204	153	0	0	695	0	-271
Other Hydrocarbons and Alcohol	67	0	0	1	0	0	68	0	0
Unfinished Oils	0	0	164	143	0	0	496	0	-189
Motor Gasoline Blending Components	0	0	40	8	0	0	130	0	-83
Aviation Gasoline Blending Components	0	0	0	1	0	0	1	0	1
<b>Finished Petroleum Products</b>	11	13,234	1,149	-352	0	51	0	580	13,513
Finished Motor Gasoline	1	6,252	177	-25	0	0	0	15	6,391
Finished Leaded Motor Gasoline	1	2,966	120	-42	0	0	0	15	3,031
Finished Unleaded Motor Gasoline	0	3,283	57	18	0	0	0	0	3,358
Gasohol	0	3	0	(s)	0	0	0	0	2
Finished Aviation Gasoline	2	23	(s)	(s)	0	0	0	0	24
Naphtha-Type Jet Fuel	0	190	3	-1	0	0	0	(s)	192
Kerosene-Type Jet Fuel	0	791	17	-36	0	0	0	1	770
Kerosene	(s)	129	16	-12	0	0	0	(s)	133
Distillate Fuel Oil	(s)	2,837	97	-290	0	8	0	66	2,586
Residual Fuel Oil	0	954	758	-56	0	43	0	234	1,466
Naphtha < 400 Deg. for Petro. Feed. Use	0	139	24	14	0	0	0	3	174
Other Oils > 400 Deg. for Petro. Feed. Use	0	256	0	-11	0	0	0	28	218
Special Naphthas	1	52	21	-5	0	0	0	3	66
Lubricants	0	142	8	(s)	0	0	0	18	132
Waxes	0	13	4	1	0	0	0	1	16
Petroleum Coke	0	395	0	12	0	0	0	210	197
Asphalt	0	440	5	47	0	0	0	(s)	491
Road Oil	0	(s)	0	(s)	0	0	0	0	(s)
Still Gas	0	542	0	0	0	0	0	0	542
Miscellaneous Products	6	81	18	10	0	0	0	1	115
<b>Total</b>	10,283	13,492	5,230	-619	324	-1	12,957	932	14,820

<sup>1</sup> Unaccounted for crude oil is a balancing item.

<sup>2</sup> Total equals refinery fuel use and loss.

(s) Less than 500 barrels per day.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 5. Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products, January - October 1982  
(Thousand Barrels per Day)

Commodity	Supply					Disposition			
	Field Production	Refinery Production	Imports	Stock With-drawal(+)-Addi-tion(-)	Unac-counted For Crude Oil <sup>1</sup>	Crude Used Directly and Losses <sup>2</sup>	Refinery Inputs	Exports	Products Supplied
Crude Oil (including lease condensate)	E 8,670	0	3,472	-136	102	-63	11,807	238	0
Natural Gas Plant Liquids and LRGs	1,522	273	239	99	0	0	503	68	1,562
Natural Gasoline and Isopentane	203	0	16	10	0	0	179	0	50
Unfractionated Stream	-3	0	0	3	0	0	(s)	0	1
Plant Condensate	34	0	5	(s)	0	0	39	0	(s)
Liquefied Petroleum Gases and Ethane	1,288	273	218	86	0	0	285	68	1,511
Ethane	274	5	47	-1	0	0	4	(s)	321
Propane	462	251	60	46	0	0	4	33	782
Butane	221	12	57	15	0	0	164	36	106
Butane-Propane Mixtures	4	4	23	1	0	0	5	0	28
Ethane-Propane Mixtures	216	0	30	27	0	0	(s)	0	273
Isobutane	111	(s)	0	-2	0	0	108	0	1
Other Liquids	53	0	163	18	0	0	563	0	-328
Other Hydrocarbons and Alcohol	53	0	0	(s)	0	0	53	0	0
Unfinished Oils	0	0	126	-7	0	0	332	0	-213
Motor Gasoline Blending Components	0	0	37	24	0	0	179	0	-118
Aviation Gasoline Blending Components	0	0	0	1	0	0	-2	0	3
Finished Petroleum Products	15	13,116	1,149	183	0	60	0	507	14,016
Finished Motor Gasoline	2	6,333	185	37	0	0	0	22	6,534
Finished Leaded Motor Gasoline	1	3,001	118	44	0	0	0	22	3,143
Finished Unleaded Motor Gasoline	(s)	3,329	66	-7	0	0	0	0	3,389
Gasohol	0	3	0	(s)	0	0	0	0	3
Finished Aviation Gasoline	2	24	(s)	2	0	0	0	0	27
Naphtha-Type Jet Fuel	0	200	6	2	0	0	0	1	207
Kerosene-Type Jet Fuel	(s)	776	23	-2	0	0	0	3	794
Kerosene	(s)	109	10	3	0	0	0	1	121
Distillate Fuel Oil	(s)	2,583	86	70	0	11	0	72	2,678
Residual Fuel Oil	0	1,080	751	47	0	50	0	214	1,713
Naphtha < 400 Deg. for Petro. Feed. Use	0	152	53	2	0	0	0	4	203
Other Oils > 400 Deg. for Petro. Feed. Use	0	270	0	-1	0	0	0	20	249
Special Naphthas	3	52	19	1	0	0	0	6	69
Lubricants	0	143	8	5	0	0	0	17	140
Waxes	0	14	1	(s)	0	0	0	1	14
Petroleum Coke	0	406	0	-4	0	0	0	144	257
Asphalt	0	337	5	21	0	0	0	1	362
Road Oil	0	2	(s)	(s)	0	0	0	0	2
Still Gas	0	558	0	0	0	0	0	0	558
Miscellaneous Products	9	79	2	(s)	0	0	0	1	88
Total	10,261	13,389	5,023	164	102	-3	12,872	813	15,250

<sup>1</sup> Unaccounted for crude oil is a balancing item.

<sup>2</sup> Total equals refinery fuel use and loss.

(s) Less than 500 barrels per day.

E Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 6. PAD District I, Supply and Disposition of Crude Oil and Petroleum Products, October 1982  
(Thousands of Barrels)

Commodity	Field Production	Refinery Production	Imports	Supply Stock With- drawal (+) or Addition (-)	Unac- counted For Crude Oil <sup>1</sup>	Crude Used Directly and Losses <sup>2</sup>	Net Receipts	Refinery Inputs	Disposition		Ending Stocks
									Exports	Products Supplied	
<b>Crude Oil (including lease condensate)</b>	<b>2,586</b>	<b>0</b>	<b>28,582</b>	<b>-254</b>	<b>-256</b>	<b>-5</b>	<b>3,676</b>	<b>34,429</b>	<b>0</b>	<b>0</b>	<b>18,327</b>
<b>Natural Gas Plant Liquids and LRGs</b>	<b>926</b>	<b>1,177</b>	<b>320</b>	<b>-299</b>	<b>0</b>	<b>0</b>	<b>2,521</b>	<b>192</b>	<b>55</b>	<b>4,398</b>	<b>5,426</b>
Liquefied Petroleum Gases	460	1,177	319	-294	0	0	2,521	171	55	3,957	5,398
Ethane	321	0	0	0	0	0	0	0	(s)	321	0
Other Products <sup>3</sup>	144	0	1	-4	0	0	0	21	0	120	28
<b>Other Liquids</b>	<b>195</b>	<b>0</b>	<b>2,786</b>	<b>2,323</b>	<b>0</b>	<b>0</b>	<b>1,254</b>	<b>5,852</b>	<b>0</b>	<b>706</b>	<b>19,601</b>
Other Hydrocarbons and Alcohol	195	0	0	-5	0	0	0	190	0	0	19
Unfinished Oils	0	0	2,026	2,049	0	0	1,254	4,940	0	389	15,017
Motor Gasoline Blending Components	0	0	759	283	0	0	0	726	0	316	4,561
Aviation Gasoline Blending Components	0	0	0	-4	0	0	0	-4	0	0	4
<b>Finished Petroleum Products</b>	<b>45</b>	<b>40,927</b>	<b>27,836</b>	<b>-11,634</b>	<b>0</b>	<b>0</b>	<b>78,435</b>	<b>0</b>	<b>817</b>	<b>134,792</b>	<b>191,497</b>
Finished Motor Gasoline	45	18,614	4,103	-341	0	0	44,106	0	2	66,525	58,965
Finished Leaded Motor Gasoline	45	7,400	2,696	-77	0	0	18,782	0	2	28,844	27,577
Finished Unleaded Motor Gasoline	0	11,214	1,408	-272	0	0	25,324	0	0	37,674	31,386
Gasohol	0	0	0	8	0	0	0	0	0	8	2
Finished Aviation Gasoline	0	6	1	69	0	0	161	0	0	237	326
Naphtha-Type Jet Fuel	0	427	91	-24	0	0	359	0	(s)	853	527
Kerosene-Type Jet Fuel	0	773	534	-497	0	0	7,794	0	0	8,604	9,534
Kerosene	0	476	497	-159	0	0	694	0	(s)	1,508	4,453
Distillate Fuel Oil	0	9,805	2,324	-7,778	0	0	20,254	0	1	24,604	75,728
Residual Fuel Oil	0	3,075	19,009	-3,789	0	0	3,087	0	(s)	21,382	32,774
Naphtha and Other Oils for Petrochem.	0	464	281	89	0	0	10	0	59	786	102
Feedstock	0	-10	405	-117	0	0	286	0	3	561	1,050
Special Naphthas	0	709	177	249	0	0	804	0	226	1,713	3,097
Lubricants	0	103	73	-17	0	0	19	0	7	171	177
Waxes	0	1,038	0	347	0	0	0	0	500	885	926
Petroleum Coke	0	3,252	132	290	0	0	343	0	8	4,009	3,427
Asphalt	0	0	0	0	0	0	0	0	0	0	0
Road Oil	0	1,775	0	0	0	0	0	0	0	1,775	0
Still Gas	0	420	210	44	0	0	518	0	12	1,180	411
Miscellaneous Products	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>3,851</b>	<b>42,104</b>	<b>59,524</b>	<b>-9,864</b>	<b>-256</b>	<b>-5</b>	<b>85,886</b>	<b>40,473</b>	<b>872</b>	<b>139,895</b>	<b>234,851</b>

<sup>1</sup> Unaccounted for crude oil is a balancing item.

<sup>2</sup> Total equals refinery fuel use and loss.

<sup>3</sup> Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.

(s) Less than 500 barrels.

E Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 7. PAD District II Supply and Disposition of Crude Oil and Petroleum Products, October 1982  
(Thousands of Barrels)

Commodity	Supply					Disposition					Ending Stocks
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil <sup>1</sup>	Crude Used Directly and Losses <sup>2</sup>	Net Receipts	Refinery Inputs	Exports	Products Supplied	
Crude Oil (including lease condensate)	E 31,437	0	16,406	228	34,431	-12	1,252	81,237	2,505	0	74,161
Natural Gas Plant Liquids and LRGs	8,923	2,110	3,988	1,595	0	0	5,581	4,714	1,414	16,069	32,301
Liquefied Petroleum Gases	6,830	2,080	2,883	1,915	0	0	4,712	3,164	1,414	13,841	27,937
Ethane	2,030	30	1,105	-18	0	0	0	0	0	3,148	1,327
Other Products <sup>3</sup>	63	0	0	-302	0	0	869	1,550	0	-920	3,037
Other Liquids	328	0	503	1,420	0	0	774	3,984	0	-959	29,114
Other Hydrocarbons and Alcohol	328	0	0	54	0	0	0	382	0	0	50
Unfinished Oils	0	0	225	243	0	0	47	1,309	0	-794	20,318
Motor Gasoline Blending Components	0	0	277	1,058	0	0	727	2,228	0	-166	8,604
Aviation Gasoline Blending Components	0	0	0	65	0	0	0	65	0	0	142
Finished Petroleum Products	16	91,572	565	5,241	0	0	19,075	0	360	116,108	128,565
Finished Motor Gasoline	0	50,201	3	1,452	0	0	13,922	0	48	65,530	58,403
Finished Leaded Motor Gasoline	0	26,232	1	-44	0	0	7,227	0	48	33,368	30,353
Finished Unleaded Motor Gasoline	0	23,935	2	1,521	0	0	6,695	0	0	32,153	28,007
Gasohol	0	34	0	-25	0	0	0	0	0	9	43
Finished Aviation Gasoline	0	106	0	12	0	0	139	0	0	257	507
Naphtha-Type Jet Fuel	0	958	0	-25	0	0	98	0	0	1,031	1,295
Kerosene-Type Jet Fuel	0	3,774	0	758	0	0	891	0	0	5,423	7,072
Kerosene	0	460	0	-73	0	0	225	0	0	612	2,955
Distillate Fuel Oil	2	20,777	0	1,265	0	0	3,925	0	0	25,968	44,256
Residual Fuel Oil	0	2,134	316	711	0	0	-721	0	0	2,440	5,074
Naphtha and Other Oils for Petro. Feed.	0	1,544	85	-42	0	0	27	0	30	1,585	311
Special Naphthas	0	446	80	-60	0	0	89	0	1	554	623
Lubricants	0	808	63	108	0	0	176	0	17	1,139	1,843
Waxes	0	33	4	15	0	0	-9	0	(s)	43	64
Petroleum Coke	0	2,890	0	-119	0	0	0	0	263	2,508	1,788
Asphalt	0	3,977	14	1,192	0	0	275	0	1	5,457	4,231
Road Oil	0	-6	0	13	0	0	0	0	0	7	20
Still Gas	0	3,292	0	0	0	0	0	0	0	3,292	0
Miscellaneous Products	14	178	0	34	0	0	38	0	(s)	264	123
Total	40,704	93,682	21,462	8,484	34,431	-12	26,682	89,935	4,279	131,218	264,141

<sup>1</sup> Unaccounted for crude oil is a balancing item.

<sup>2</sup> Total equals refinery fuel use and loss.

<sup>3</sup> Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.

(s) Less than 500 barrels.

E. Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.



Table 8. PAD District III Supply and Disposition of Crude Oil and Petroleum Products, October 1982  
(Thousands of Barrels)

Commodity	Field Production	Refinery Production	Imports	Supply		Crude Used Directly and Losses <sup>2</sup>	Net Receipts	Disposition			
				Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil <sup>1</sup>			Refinery Inputs	Exports	Products Supplied	Ending Stocks
Crude Oil (including lease condensate) .....											
	E 130,538	0	59,825	-11,991	-19,522	-4	16,495	175,341	0	0	442,731
Natural Gas Plant Liquids and LRGs .....											
Liquefied Petroleum Gases .....	34,234	3,418	2,191	3,578	0	0	-7,655	9,467	915	25,383	78,899
Ethane .....	23,305	3,297	802	1,822	0	0	-7,182	5,001	915	16,127	67,079
Other Products <sup>3</sup> .....	6,557	121	0	-157	0	0	0	33	( <sup>3</sup> )	6,488	3,833
	4,373	0	1,389	1,913	0	0	-473	4,433	0	2,769	7,988
Other Liquids .....											
Other Hydrocarbons and Alcohol .....	644	0	2,999	-15	0	0	-1,672	10,464	0	-8,508	68,966
Unfinished Oils .....	644	0	0	-31	0	0	0	613	0	0	117
Motor Gasoline Blending Components .....	0	0	2,818	468	0	0	-945	7,756	0	-5,415	49,590
Aviation Gasoline Blending Components .....	0	0	181	-455	0	0	-727	2,118	0	-3,119	19,066
	0	0	0	3	0	0	0	-23	0	26	193
Finished Petroleum Products .....											
Finished Motor Gasoline .....	256	199,277	4,732	-7,299	0	5	-101,084	0	10,559	85,328	138,738
Finished Leaded Motor Gasoline .....	0	89,661	( <sup>3</sup> )	-1,904	0	0	-60,078	0	396	27,283	50,734
Finished Unleaded Motor Gasoline .....	0	40,874	( <sup>3</sup> )	-1,034	0	0	-27,152	0	396	12,292	24,683
Gasohol .....	0	48,786	0	-870	0	0	-32,926	0	0	14,990	26,051
Finished Aviation Gasoline .....	0	1	0	0	0	0	0	0	0	1	0
Naphtha-Type Jet Fuel .....	51	407	0	-41	0	0	-354	0	0	62	697
Kerosene-Type Jet Fuel .....	0	2,698	0	-118	0	0	-533	0	0	2,047	3,034
Kerosene .....	0	13,317	0	-2,282	0	0	-9,501	0	0	1,534	11,836
Distillate Fuel Oil .....	3	2,886	0	-169	0	0	-919	0	( <sup>3</sup> )	1,800	2,574
Residual Fuel Oil .....	1	43,895	357	-2,914	0	5	-24,394	0	851	16,099	37,018
Naphtha and Other Oils for Petro. Feed .....	0	14,655	3,463	635	0	0	-2,739	0	4,984	11,030	15,583
Special Naphthas .....	0	9,487	363	280	0	0	-37	0	875	9,217	2,922
Lubricants .....	44	1,044	151	47	0	0	-375	0	90	820	1,835
Waxes .....	0	2,542	( <sup>3</sup> )	-163	0	0	-970	0	270	1,139	6,147
Petroleum Coke .....	0	194	36	6	0	0	-10	0	8	218	444
Asphalt .....	0	4,868	0	36	0	0	0	0	3,078	1,826	802
Road Oil .....	0	3,950	0	-825	0	0	-618	0	2	2,505	3,085
Still Gas .....	0	0	0	0	0	0	0	0	0	0	2
Miscellaneous Products .....	0	7,935	0	0	0	0	0	0	0	7,935	0
	158	1,738	363	113	0	0	-556	0	6	1,810	2,025
Total .....	165,672	202,695	69,747	-15,727	-19,522	1	-93,916	195,272	11,474	102,204	729,334

1 Unaccounted for crude oil is a balancing item.

<sup>1</sup> Unaccounted for crude oil is a balancing item.

<sup>2</sup> Total equals refinery fuel use and loss.

<sup>3</sup> Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.

(<sup>3</sup>) Less than 500 barrels.

E Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 9. PAD District IV Supply and Disposition of Crude Oil and Petroleum Products, October 1982

(Thousands of Barrels)

Commodity	Supply					Disposition					
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil <sup>1</sup>	Crude Used Directly and Losses <sup>2</sup>	Net Receipts	Refinery Inputs	Exports	Products Supplied	Ending Stocks
Crude Oil (including lease condensate)	E 17,891	0	1,629	-124	-6,152	-8	0	13,236	0	0	11,793
Natural Gas Plant Liquids and LRGs	2,243	72	528	-72	0	0	-447	559	0	1,765	1,263
Liquefied Petroleum Gases	889	72	488	-60	0	0	-51	403	0	916	986
Ethane	6	0	0	(s)	0	0	0	0	0	6	(s)
Other Products <sup>3</sup>	1,347	0	59	-11	0	0	-396	156	0	843	277
Other Liquids	69	0	0	154	0	0	0	-38	0	261	4,496
Other Hydrocarbons and Alcohol	69	0	0	0	0	0	0	69	0	0	0
Unfinished Oils	0	0	0	171	0	0	0	-253	0	424	2,848
Motor Gasoline Blending Components	0	0	0	-17	0	0	0	146	0	-163	1,648
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0
Finished Petroleum Products	16	13,932	1	-430	0	8	596	0	2	14,122	11,628
Finished Motor Gasoline	0	7,357	0	-715	0	0	489	0	0	7,131	4,794
Finished Leaded Motor Gasoline	0	4,839	0	-363	0	0	96	0	0	4,572	2,874
Finished Unleaded Motor Gasoline	0	2,518	0	-352	0	0	393	0	0	2,559	1,919
Gasohol	0	0	0	0	0	0	0	0	0	0	1
Finished Aviation Gasoline	0	25	0	-6	0	0	14	0	0	33	57
Naphtha-Type Jet Fuel	0	408	0	-40	0	0	-57	0	0	311	299
Kerosene-Type Jet Fuel	0	476	0	123	0	0	592	0	0	1,191	609
Kerosene	0	50	0	15	0	0	0	0	0	65	39
Distillate Fuel Oil	0	3,669	1	-20	0	0	-442	0	0	3,208	3,549
Residual Fuel Oil	0	477	0	-94	0	8	0	0	0	391	545
Naphtha and Other Oils for Petro. Feed.	0	0	0	0	0	0	0	0	1	-1	0
Special Naphthas	0	6	1	-4	0	0	0	0	0	3	10
Lubricants	0	30	(s)	-7	0	0	0	0	1	22	83
Waxes	0	9	0	1	0	0	0	0	0	10	4
Petroleum Coke	0	324	0	-58	0	0	0	0	0	266	661
Asphalt	0	562	0	376	0	0	0	0	1	937	973
Road Oil	0	0	0	0	0	0	0	0	0	0	3
Still Gas	0	516	0	0	0	0	0	0	0	516	0
Miscellaneous Products	16	23	0	-1	0	0	0	0	(s)	38	2
Total	20,219	14,004	2,158	-471	-6,152	0	149	13,757	2	16,148	29,180

<sup>1</sup> Unaccounted for crude oil is a balancing item.<sup>2</sup> Total equals refinery fuel use and loss.<sup>3</sup> Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.

(s) Less than 500 barrels.

E Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 10. PAD District V Supply and Disposition of Crude Oil and Petroleum Products, October 1982  
(Thousands of Barrels)

Commodity	Field Production	Refinery Production	Imports	Supply With- drawal (+) or Addi- tion (-)	Unac- counted For Crude Oil <sup>1</sup>	Crude Used Directly and Losses <sup>2</sup>	Net Receipts	Refinery Inputs	Disposition		Ending Stocks
									Exports	Products Supplied	
<b>Crude Oil (including lease condensate)</b>	<b>E 86,404</b>	<b>0</b>	<b>6,279</b>	<b>-5,346</b>	<b>1,558</b>	<b>-1,599</b>	<b>-21,423</b>	<b>59,994</b>	<b>5,879</b>	<b>0</b>	<b>88,282</b>
Natural Gas Plant Liquids and LRGs	1,071	1,216	446	-348	0	0	0	944	141	1,300	2,124
Liquefied Petroleum Gases	651	1,206	446	-344	0	0	0	710	141	1,107	2,063
Ethane	0	10	0	0	0	0	0	0	0	10	0
Other Products <sup>3</sup>	421	0	0	-4	0	0	0	234	0	183	61
<b>Other Liquids</b>	<b>855</b>	<b>0</b>	<b>26</b>	<b>855</b>	<b>0</b>	<b>0</b>	<b>-356</b>	<b>1,288</b>	<b>0</b>	<b>92</b>	<b>33,987</b>
Other Hydrocarbons and Alcohol	855	0	0	0	0	0	0	855	0	0	5
Unfinished Oils	0	0	0	1,509	0	0	-356	1,626	0	-473	25,565
Motor Gasoline Blending Components	0	0	26	-635	0	0	0	-1,174	0	565	8,379
Aviation Gasoline Blending Components	0	0	0	-19	0	0	0	-19	0	0	38
<b>Finished Petroleum Products</b>	<b>0</b>	<b>64,552</b>	<b>2,494</b>	<b>3,214</b>	<b>0</b>	<b>1,570</b>	<b>2,978</b>	<b>0</b>	<b>6,243</b>	<b>68,566</b>	<b>51,837</b>
Finished Motor Gasoline	0	27,975	1,388	746	0	0	1,561	0	7	31,663	19,199
Finished Leaded Motor Gasoline	0	12,604	1,034	210	0	0	1,047	0	7	14,889	9,257
Finished Unleaded Motor Gasoline	0	15,325	354	533	0	0	514	0	0	16,726	9,938
Gasohol	0	46	0	3	0	0	0	0	0	49	4
Finished Aviation Gasoline	0	182	0	-46	0	0	40	0	0	156	825
Naphtha-Type Jet Fuel	0	1,389	0	175	0	0	133	0	0	1,697	1,235
Kerosene-Type Jet Fuel	0	6,166	0	775	0	0	224	0	0	7,130	5,445
Kerosene	0	135	0	10	0	0	0	0	0	145	199
Distillate Fuel Oil	0	9,804	333	454	0	235	657	0	0	10,292	9,636
Residual Fuel Oil	0	9,242	720	788	0	1,335	373	0	0	10,193	9,598
Naphtha and Other Oils for Petro. Feed	0	747	29	-232	0	0	0	0	0	541	581
Special Naphthas	0	115	19	-10	0	0	0	0	2	122	284
Lubricants	0	305	(s)	-178	0	0	-10	0	49	68	1,474
Waxes	0	53	5	12	0	0	0	0	2	55	55
Petroleum Coke	0	3,140	0	172	0	0	0	0	0	632	1,865
Asphalt	0	1,887	0	424	0	0	0	0	2,680	2,309	1,411
Road Oil	0	8	0	0	0	0	0	0	0	8	27
Still Gas	0	3,284	0	0	0	0	0	0	0	3,284	0
Miscellaneous Products	0	140	0	124	0	0	0	0	5	259	303
<b>Total</b>	<b>88,330</b>	<b>65,768</b>	<b>9,245</b>	<b>-1,625</b>	<b>1,558</b>	<b>-29</b>	<b>-18,801</b>	<b>62,226</b>	<b>12,263</b>	<b>69,958</b>	<b>176,230</b>

<sup>1</sup> Unaccounted for crude oil is a balancing item.

<sup>2</sup> Total equals refinery fuel use and loss.

<sup>3</sup> Includes natural gasoline, isopentane, unrefined stream, and plant condensate.

(s) Less than 500 barrels.

E Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 11. Production of Crude Oil (including Lease Condensate) by PAD District and State, for the Most Current Month,<sup>1</sup> August 1982  
(Thousands of Barrels)

PAD District and State	Production	
	Total	Daily Average
<b>PAD District I</b>		
Florida .....	2,053	67
New York .....	E 71	2
Pennsylvania .....	E 317	10
Virginia .....	0	0
West Virginia .....	E 295	10
<b>Total</b> .....	<b>E 2,746</b>	<b>89</b>
<b>PAD District II</b>		
Illinois .....	2,500	81
Indiana .....	E 401	13
Kansas .....	5,951	192
Kentucky .....	E 556	18
Michigan .....	2,586	83
Missouri .....	E 19	1
Nebraska .....	580	19
North Dakota .....	4,137	133
Ohio .....	E 1,151	37
Oklahoma .....	13,083	422
South Dakota .....	102	3
Tennessee .....	104	3
<b>Total</b> .....	<b>E 31,170</b>	<b>1,005</b>
<b>PAD District III</b>		
Alabama .....	1,683	54
Arkansas .....	E 1,601	52
Louisiana .....	36,376	1,173
Gulf Coast .....	3,015	97
Rest Of State .....	39,391	1,271
Total Louisiana .....	2,828	91
Mississippi .....		
New Mexico .....		
Northwestern .....	508	16
Southeastern .....	5,465	176
Total New Mexico .....	5,973	193
Texas .....		
TRRC District 01 .....	2,197	71
TRRC District 02 .....	3,416	110
TRRC District 03 .....	10,764	347
TRRC District 04 .....	2,358	76
TRRC District 05 .....	667	22
TRRC District 06, excluding East Texas .....	3,537	114
TRRC District 07B .....	2,774	89
TRRC District 07C .....	2,805	90
TRRC District 08 .....	19,402	626
TRRC District 08A .....	20,100	648
TRRC District 09 .....	3,203	103
TRRC District 10 .....	1,748	56
East Texas .....	4,422	143
Total Texas .....	77,393	2,497
<b>Total</b> .....	<b>E 128,869</b>	<b>4,157</b>
<b>PAD District IV</b>		
Colorado .....	2,601	84
Montana .....	2,680	86
Utah .....	E 1,949	63
Wyoming .....	E 10,192	329
<b>Total</b> .....	<b>E 17,422</b>	<b>562</b>
<b>PAD District V</b>		
Alaska .....		
South Alaska .....	2,370	76
North Slope .....	50,247	1,621
Total Alaska .....	52,617	1,697
Arizona .....	29	1
California .....		
Central Coastal .....	6,587	212
East Central .....	20,892	674
North .....	16	1
South .....	6,831	220
Total California .....	34,326	1,107
Nevada .....	50	2
<b>Total</b> .....	<b>87,022</b>	<b>2,807</b>
<b>United States Total</b> .....	<b>E 267,229</b>	<b>8,620</b>

<sup>1</sup> Includes offshore production.  
Sources: See Explanatory Notes on Data Collection and Estimation.  
E Estimated.

**Table 12. Offshore Production of Crude Oil (including Lease Condensate) By State, for the Most Current Month,<sup>1</sup> August 1982  
(Thousands of Barrels)**

State	Offshore Production	
	Total	Daily Average
Alaska <sup>2</sup>		
California	2,118	68
Federal		
State	2,491	80
California, Total	3,356	108
Louisiana	5,847	189
Federal		
State	23,451	756
Louisiana, Total	2,154	69
Texas	25,605	826
Federal		
State	1,283	41
Texas, Total	139	4
	1,422	46
<b>United States Total</b>	<b>34,992</b>	<b>1,129</b>

<sup>1</sup> These production data are included in Table 11.

<sup>2</sup> All offshore production within State boundaries.

Note: Total may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation.

**Table 13. Production of Lease Condensate by State, for the Most Current Month,<sup>1</sup> August 1982  
(Thousands of Barrels)**

State	Lease Condensate Production	
	Total	Daily Average
Alabama	995	32
California	11	(s)
Louisiana	5,473	177
Mississippi	164	5
New Mexico	321	10
Oklahoma	812	26
Texas	3,468	112
<b>Total</b>	<b>11,244</b>	<b>363</b>

<sup>1</sup> These production data are included in Table 11. Small amounts of lease condensate are known to be produced in states other than those listed, however, statistics on this production are not available.

(s) Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 14. Natural Gas Processing Plant Production of Petroleum Products by PAD District,<sup>1</sup> October 1982  
(Thousands of Barrels)

Commodity	PAD District I			PAD District II				PAD District III				PAD District IV		United States			
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Dak.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico		Total	Rocky Mts.	Dist. V West Coast
Natural Gas Plant Liquids .....	568	358	926	0	1,938	437	6,548	8,923	19,219	2,746	8,000	829	3,440	34,234	2,243	1,071	47,397
Isopentane .....	0	0	0	0	0	0	316	316	458	71	42	0	0	571	2	0	889
Natural Gasoline .....	81	35	116	0	58	96	1,045	1,199	1,992	-447	1,105	144	233	3,028	397	438	5,179
Unfractionated Stream .....	28	0	28	0	983	76	-2,573	-1,513	8,070	-11,683	972	144	2,180	-316	931	-18	-888
Plant Condensate .....	0	0	0	0	39	0	22	61	210	929	25	-77	3	1,090	17	0	1,168
Liquefied Petroleum Gases and Ethane .....	459	323	782	0	857	265	7,738	8,860	8,489	13,876	5,855	618	1,023	29,861	896	651	41,049
Ethane .....	157	165	321	0	405	0	1,626	2,030	1,495	2,692	2,235	44	92	6,557	6	0	8,915
Propane .....	180	106	285	0	314	162	2,637	3,113	2,955	3,880	1,974	173	509	9,491	557	393	13,840
Butane .....	97	35	132	0	51	90	1,038	1,179	1,274	2,705	744	229	186	5,138	315	202	6,966
Butane-Propane Mixtures .....	0	0	0	0	18	0	0	18	67	21	2	13	0	102	7	35	162
Ethane-Propane Mixtures .....	0	0	0	0	33	0	1,996	2,029	2,042	3,216	164	0	169	5,592	0	0	7,621
Isobutane .....	26	18	43	0	36	14	441	491	655	1,362	737	159	68	2,981	10	20	3,545
Finished Motor Gasoline .....	45	0	45	0	0	0	0	0	0	0	0	0	0	0	0	0	45
Finished Leaded Motor Gasoline .....	45	0	45	0	0	0	0	0	0	0	0	0	0	0	0	0	45
Finished Unleaded Motor Gasoline .....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gasohol .....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finished Aviation Gasoline .....	0	0	0	0	0	0	0	0	51	0	0	0	0	51	0	0	51
Naphtha-Type Jet Fuel .....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kerosene-Type Jet Fuel .....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kerosene .....	0	0	0	0	0	0	0	0	(s)	0	0	(s)	2	3	0	0	3
Distillate Fuel Oil .....	0	0	0	0	0	0	2	2	1	0	0	0	0	1	0	0	2
Special Naphthas .....	0	0	0	0	0	0	0	0	44	0	0	0	0	44	0	0	44
Miscellaneous Products .....	0	0	0	0	1	0	13	14	143	4	3	7	1	158	16	0	188
Total Production .....	613	358	970	0	1,939	437	6,563	8,939	19,459	2,750	8,002	836	3,444	34,490	2,259	1,071	47,730

<sup>1</sup> Production represents quantity of natural gas processing plant output less input to fractionating facilities.

(s) Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Source: See Explanatory Notes on Data Collection and Estimation.

Table 15. Refinery Input of Crude Oil and Petroleum Products by PAD District, October 1982  
(Thousands of Barrels, Except Where Noted)

Commodity	PAD District I			PAD District II					PAD District III				PAD		United States		
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Dak.	Okl., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total		Rocky Mt.	Dist. IV West Coast
Crude Oil (including lease condensate) .....	32,600	1,829	34,429	1,752	49,779	8,157	21,549	81,237	13,594	91,133	62,951	5,236	2,427	175,341	13,236	59,994	364,237
Natural Gas Plant Liquids																	
Natural Gasoline and Isopentane .....	21	0	21	0	384	230	781	1,395	840	1,892	464	111	123	3,430	75	234	5,155
Unfractionated Stream .....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Plant Condensate .....	0	0	0	0	142	0	13	155	36	750	2	215	0	1,003	81	0	1,239
LPG and Ethane .....	166	5	171	91	1,582	413	1,078	3,164	766	2,210	1,895	103	60	5,034	403	710	9,482
Ethane .....	0	0	0	0	0	0	0	0	0	0	33	0	0	33	0	0	33
Propane .....	0	0	0	0	49	0	0	49	0	0	46	0	0	46	4	0	99
Normal Butane .....	16	0	16	47	650	298	594	1,589	278	1,669	968	37	7	2,959	70	192	4,826
Other Butanes .....	0	0	0	0	245	76	66	387	106	239	0	0	0	345	252	275	1,259
Butane-Propane Mixtures .....	0	0	0	0	3	0	0	3	0	177	39	0	25	241	3	0	247
Ethane-Propane Mixtures .....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Isobutane .....	150	5	155	44	635	39	418	1,136	382	125	809	66	28	1,410	74	243	3,018
Other Liquids																	
Other Hydrocarbons .....	121	0	121	0	382	0	0	382	32	437	144	0	0	613	69	851	2,036
Alcohol .....	0	69	69	0	0	0	0	0	0	0	0	0	0	0	0	4	73
Unfinished Oil (net) .....	4,963	-23	4,940	107	1,033	-143	312	1,309	747	3,953	3,089	-127	94	7,756	-253	1,626	15,378
Motor Gasoline Blending																	
Components (net) .....	714	12	726	12	2,027	-76	265	2,228	-408	645	1,858	16	7	2,118	146	-1,174	4,044
Aviation Gasoline Blending .....																	
Components (net) .....	-4	0	-4	0	58	0	7	65	-31	18	-10	0	0	-23	0	-19	19
Total Input to Refineries .....	38,581	1,892	40,473	1,962	55,387	8,581	24,005	89,935	15,576	101,038	70,393	5,554	2,711	195,272	13,757	62,226	401,663
Crude Oil Distillation																	
Gross Input (daily average) .....	1,090	61	1,152	63	1,673	279	701	2,715	472	3,059	2,079	177	87	5,875	432	1,978	12,151
Operable Capacity (daily average) .....	1,633	99	1,733	66	2,362	295	885	3,608	622	4,301	2,766	267	120	8,066	597	3,169	17,172
Operating Ratio (percent) <sup>1</sup> .....	66.8	61.7	66.5	95.3	70.8	94.5	79.2	75.3	75.9	71.1	75.4	66.5	72.4	72.8	72.5	62.4	70.8
Crude Oil Qualities																	
Sulfur Content, Weighted Average (percent) .....	1.11	.17	1.06	.73	.84	1.62	.55	.84	.61	.96	.73	1.64	.27	.86	.77	1.01	.90
API Gravity, Weighted Average .....	30.44	42.13	31.04	37.40	35.82	30.97	36.94	35.66	38.08	33.88	32.20	31.12	39.20	33.94	36.26	25.37	32.69

<sup>1</sup> Represents gross input divided by operable capacity.

Note: Total may not equal sum of components due to independent rounding.

Source: See Explanatory Notes on Data Collection and Estimation.

Table 16. Refinery Production of Petroleum Products by PAD District, October 1982  
(Thousands of Barrels)

Commodity	PAD District I			PAD District II					PAD District III					Total		New Mexico	Total	PAD District IV		United States
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La. Ark.	Rocky Mt.	Dist. V West Coast						
Liquefied Petroleum Gases and Ethane .....	1,174	3	1,177	31	1,467	199	413	2,110	219	1,905	1,167	54	73	3,418	72	1,216	7,993			
For Petrochemical Feedstock Use .....	197	0	197	0	200	6	52	258	11	898	218	1	0	1,128	0	128	1,711			
For Other Uses .....	977	3	980	31	1,267	193	361	1,852	208	1,007	949	53	73	2,290	72	1,088	6,282			
Ethane .....	0	0	0	0	30	0	0	30	0	110	11	0	0	121	0	10	161			
For Petrochemical Feedstock Use .....	0	0	0	0	0	0	0	0	0	110	11	0	0	121	0	0	121			
For Other Uses .....	0	0	0	0	30	0	0	30	0	0	0	0	0	0	0	10	40			
Propane .....	977	3	980	31	1,356	172	525	2,084	217	1,766	1,318	42	47	3,390	181	879	7,514			
For Petrochemical Feedstock Use .....	193	0	193	0	200	0	52	252	0	617	161	0	0	778	0	106	1,329			
For Other Uses .....	784	3	787	31	1,156	172	473	1,832	217	1,149	1,157	42	47	2,612	181	773	6,185			
Butane .....	195	0	195	0	81	27	-112	-4	-9	-163	-138	10	6	-294	-107	326	116			
For Petrochemical Feedstock Use .....	4	0	4	0	0	6	0	6	0	70	34	1	0	105	0	22	137			
For Other Uses .....	191	0	191	0	81	21	-112	-10	-9	-233	-172	9	6	-399	-107	304	-21			
Butane-Propane Mixtures .....	2	0	2	0	0	0	0	0	0	91	-24	2	20	89	-2	1	90			
For Petrochemical Feedstock Use .....	0	0	0	0	0	0	0	0	0	0	12	0	0	12	0	0	12			
For Other Uses .....	2	0	2	0	0	0	0	0	0	91	-36	2	20	77	-2	1	78			
Isobutane for Petro. Feed. Use .....	0	0	0	0	0	0	0	0	11	101	0	0	0	112	0	0	112			
Finished Motor Gasoline .....	18,105	509	18,614	1,098	31,231	4,551	13,321	50,201	8,223	45,143	33,448	1,592	1,255	89,661	7,357	27,975	193,808			
Finished Leaded Motor Gasoline .....	7,078	322	7,400	559	15,095	2,582	7,996	26,232	4,240	17,811	16,862	1,200	761	40,874	4,839	12,604	91,949			
Finished Unleaded Motor Gasoline .....	11,027	187	11,214	539	16,106	1,969	5,321	23,935	3,982	27,332	16,586	392	494	48,786	2,518	15,325	101,778			
Gasohol .....	0	0	0	0	30	0	4	34	1	0	0	0	0	1	0	46	81			
Finished Aviation Gasoline .....	6	0	6	0	74	0	32	106	8	268	131	0	0	407	25	162	706			
Naphtha-Type Jet Fuel .....	387	40	427	13	478	89	378	958	710	1,148	434	183	223	2,698	408	1,389	5,880			
Kerosene-Type Jet Fuel .....	773	0	773	115	3,052	106	501	3,774	656	5,699	6,937	0	25	13,317	476	6,166	24,506			
Kerosene .....	461	15	476	0	513	59	-112	460	104	1,227	1,508	23	24	2,886	50	135	4,007			
Distillate Fuel Oil .....	9,206	599	9,805	415	11,371	2,168	6,823	20,777	3,376	24,970	13,198	1,436	915	43,895	3,669	9,804	87,950			
Disillate Fuel Oil Less No. 4 .....	9,206	598	9,804	414	11,353	2,168	6,823	20,758	3,342	24,667	13,081	1,370	721	43,181	3,646	9,689	87,078			
No. 4 Fuel Oil .....	0	1	1	1	18	0	0	19	34	303	117	66	194	714	23	115	872			
Residual Fuel Oil .....	3,019	56	3,075	124	1,198	328	484	2,134	602	7,846	5,580	542	85	14,855	477	9,242	29,583			
Naphtha < 400 Deg. For Petro. Feed. Use .....	455	0	455	0	88	0	60	148	241	3,407	-42	0	0	3,606	0	89	4,298			
Other Oils > 400 Deg. For Petro. Feed. Use .....	9	0	9	0	1,395	0	1	1,396	246	2,635	2,953	47	0	5,881	0	658	7,944			
Special Naphtas .....	-36	26	-10	0	251	0	195	446	107	673	35	229	0	1,044	6	115	1,601			
Lubricants .....	345	364	709	0	460	0	348	808	12	1,643	666	221	0	2,542	30	305	4,394			
Bright Stock .....	9	138	147	0	14	0	54	68	0	89	64	0	0	153	0	18	386			
Neutral .....	82	211	293	0	351	0	218	569	0	731	572	96	0	1,399	33	233	2,527			
Other Grades .....	254	15	269	0	95	0	76	171	12	823	30	125	0	990	-3	54	1,481			
Wax .....	21	82	103	0	3	0	30	33	8	83	69	34	0	194	9	53	392			
Microcrystalline .....	0	17	17	0	0	0	22	22	8	0	0	34	0	50	0	0	89			
Crystalline-Fully Refined .....	12	25	37	0	2	0	1	3	0	52	69	0	0	121	9	35	205			
Crystalline-Other .....	9	40	49	0	1	0	7	8	0	23	0	0	0	23	0	18	98			
Petroleum Coke .....	1,033	5	1,038	24	1,728	321	817	2,890	284	2,576	1,860	137	11	4,868	324	3,140	12,260			
Marketable .....	358	0	358	0	1,102	207	545	1,854	59	1,176	1,059	111	0	2,405	165	2,361	7,143			
Catalyst .....	675	5	680	24	626	114	272	1,036	225	1,400	801	26	11	2,463	159	779	5,117			
Asphalt .....	3,243	9	3,252	143	2,568	720	546	3,977	514	528	1,923	901	84	3,950	562	1,887	13,628			
Road Oil .....	0	0	0	0	-6	0	0	-6	0	0	0	0	0	0	0	0	2			
Still Gas .....	1,701	74	1,775	62	2,051	275	904	3,292	414	4,703	2,575	186	57	7,935	516	3,284	16,802			
For Petrochemical Feedstock Use .....	41	0	41	0	1	0	0	1	6	486	104	0	0	596	20	119	777			
For Other Uses .....	1,660	74	1,734	62	2,050	275	904	3,291	408	4,217	2,471	186	57	7,339	496	-3,165	16,025			
Miscellaneous Products .....	390	30	420	2	100	23	53	178	92	1,044	579	23	0	1,738	23	140	2,499			
Total Output .....	40,292	1,812	42,104	2,027	58,022	8,839	24,794	93,682	15,816	105,498	73,021	5,608	2,752	202,695	14,004	65,768	418,253			
Processing Gain(-) or Loss(+) <sup>1</sup> .....	-1,711	80	-1,631	-65	-2,635	-258	-789	-3,747	-240	-4,460	-2,628	-54	-41	-7,423	-247	-3,542	-16,590			

<sup>1</sup> Represents the arithmetic difference between input and output.  
Notes: Total may not equal sum of components due to independent rounding.  
See Explanatory Notes on negative product yield.  
Source: See Explanatory Notes on Data Collection and Estimation.



Table 17. Percent Refinery Yield of Petroleum Products by PAD District,<sup>1</sup> October 1982

Commodity	PAD District I			PAD District II					PAD District III			PAD District IV		United States			
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Dak.	Okl., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico		Total	Rocky Mt.	PAD Dist. V West Coast
Finished Motor Gasoline <sup>2</sup>	45.5	23.4	44.5	53.5	52.6	49.7	51.2	51.9	48.5	41.2	44.0	22.5	42.2	42.3	50.7	44.4	45.3
Finished Aviation Gasoline <sup>3</sup>	(s)	.0	(s)	.0	(s)	.0	.1	(s)	.3	.3	.2	.0	.0	.2	.2	.3	.2
Liquefied Refinery Gases & Ethane	3.1	.2	3.0	1.7	2.9	2.5	1.9	2.6	1.5	2.0	1.8	1.1	2.9	1.9	.6	2.0	2.1
Naphtha-Type Jet Fuel	1.0	2.2	1.1	.7	.9	1.1	1.7	1.2	5.0	1.2	.7	3.6	8.8	1.5	3.1	2.3	1.5
Kerosene-Type Jet Fuel	2.1	.0	2.0	6.2	6.0	1.3	2.3	4.6	4.6	6.0	10.5	.0	1.0	7.3	3.7	10.0	6.5
Kerosene	1.2	.8	1.2	0	1.0	.7	.5	.6	.7	1.3	2.3	.5	1.0	1.6	.4	.2	1.1
Distillate Fuel Oil	24.5	33.2	24.9	22.3	22.4	27.1	31.2	25.2	23.5	26.3	20.0	28.1	36.3	24.0	28.3	15.9	23.2
Residual Fuel Oil	8.0	3.1	7.8	6.7	2.4	4.1	2.2	2.6	4.2	8.3	8.4	10.6	3.4	8.0	3.7	15.0	7.8
Naphtha < 400 Deg. F. Petro. Feed. Use	1.2	0	1.2	0	.2	0	.3	.2	1.7	3.6	.1	.0	0	2.0	0	.1	1.1
Other Oils > 400 Deg. F. Petro. Feed. Use	(s)	0	(s)	0	2.7	0	(s)	1.7	1.7	2.8	4.5	.9	0	3.2	0	1.1	2.1
Special Naphthas	.1	1.4	(s)	0	.5	0	.9	.5	.7	.7	.1	4.5	0	.6	(s)	.2	.4
Lubricants	.9	20.2	1.8	0	.9	0	1.6	1.0	.1	1.7	1.0	4.3	0	1.4	.2	.5	1.2
Wax	.1	4.5	.3	0	(s)	0	.1	(s)	.1	.1	.1	.7	0	.1	.1	.1	.1
Petroleum Coke	2.8	.3	2.6	1.3	3.4	4.0	3.7	3.5	2.0	2.7	2.8	2.7	.4	2.7	2.5	5.1	3.2
Asphalt	8.6	.5	8.3	7.7	5.1	9.0	2.5	4.8	3.6	.6	2.9	17.6	3.3	2.2	4.3	3.1	3.6
Road Oil	0	0	0	0	(s)	0	0	(s)	0	0	0	.0	0	.0	.0	(s)	(s)
Still Gas for Petro. Feed. Use	.1	0	.1	0	(s)	0	0	(s)	(s)	.5	.2	0	0	.3	.2	.2	.2
Still Gas for Other Uses	4.4	4.1	4.4	3.3	4.0	3.4	4.1	4.0	2.8	4.4	3.7	3.6	2.3	4.0	3.8	5.1	4.2
Miscellaneous Products	1.0	1.7	1.1	.1	.2	.3	.2	.2	.6	1.1	.9	.5	0	.9	.2	.2	.7
Processing Gain(-) or Loss(+) <sup>4</sup>	-4.6	4.4	-4.1	-3.5	-5.2	-3.2	-3.6	-4.5	-1.7	-4.7	-4.0	-1.1	-1.6	-4.1	-1.9	-5.7	-4.4

<sup>1</sup> Based on crude oil input and net reruns of unfinished oils.

<sup>1</sup> Based on crude oil input and net returns of unfinished oils.

<sup>2</sup> Based on total finished motor gasoline output plus net output of motor gasoline blending components, minus input of natural gas plant liquids, other hydrocarbons and alcohol.

<sup>3</sup> Based on finished aviation gasoline output plus net output of aviation gasoline blending components.

<sup>4</sup> Represents the arithmetic difference between Input and Production.

(s) Less than 0.05 percent.

Note: Total may not equal sum of components due to independent rounding.

See Explanatory Notes on negative product yields.

Source: See Explanatory Notes on Data Collection and Estimation.

**Table 18. Refinery Receipts of Crude Oil by PAD District, October 1982**  
(Thousands of Barrels)

Method	PAD District I			PAD District II				PAD District III					PAD District IV		United States		
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas		La. Gulf Coast		No. La., Ark.	New Mexico	Total	Rocky Mt.	Dist. V West Coast
									Inland	Gulf Coast	Gulf Coast	Coast					
Pipeline																	
Domestic .....	0	941	941	1,557	34,082	4,444	19,949	60,032	11,874	50,725	31,362	3,409	2,023	99,393	10,584	28,816	199,766
Foreign .....	0	0	0	73	12,766	3,577	887	17,303	782	11,077	6,351	320	0	18,530	1,648	489	37,970
Tanker																	
Domestic .....	3,605	0	3,605	0	0	0	0	0	0	6,104	5,085	0	0	11,189	0	25,110	39,904
Foreign .....	24,767	0	24,767	0	317	0	0	317	0	19,872	16,207	0	0	36,079	0	5,760	66,923
Barge																	
Domestic .....	0	143	143	0	1,027	0	0	1,027	0	5,224	4,873	115	0	10,212	0	578	11,960
Foreign .....	4,682	0	4,682	0	668	0	0	668	0	57	188	534	0	779	0	0	6,129
Tank Cars																	
Domestic .....	82	269	351	0	0	0	0	0	0	0	0	17	0	17	0	136	504
Foreign .....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trucks																	
Domestic .....	0	446	446	99	331	13	844	1,287	673	209	434	1,004	313	2,633	878	1,340	6,584
Foreign .....	0	0	0	0	0	0	0	0	186	0	0	0	0	186	0	0	186
Total																	
Domestic .....	3,687	1,799	5,486	1,656	35,440	4,457	20,793	62,346	12,547	62,262	41,754	4,545	2,336	123,444	11,462	55,980	258,718
Foreign .....	29,449	0	29,449	73	13,751	3,577	887	18,288	968	31,006	22,746	854	0	55,574	1,648	6,249	111,208

Note: Total may not equal sum of components due to independent rounding.  
Source: See Explanatory Notes on Data Collection and Estimation.

**Table 19. Fuels Consumed at Refineries by PAD District, October 1982**  
(Thousands of Barrels, Except Where Noted)

Commodity	PAD District I			PAD District II					PAD District III					PAD District IV		United States	
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total	Rocky Mt.		Dist. V West Coast
Crude Oil (including lease condensate)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(s)
Liquefied Petroleum Gases <sup>1</sup>	22	4	25	6	36	20	19	81	(s)	1	327	0	4	333	9	274	723
Unfinished Oils	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Distillate Fuel Oil	100	20	120	0	6	0	(s)	6	15	0	3	0	(s)	17	0	14	157
Residual Fuel Oil	559	52	610	17	321	61	1	400	10	153	89	18	0	270	74	260	1,613
Marketable Petroleum Coke	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	47	61
Catalyst Petroleum Coke	675	5	681	24	584	64	218	889	224	1,348	800	26	11	2,409	160	780	4,918
Sill Gas	1,408	74	1,482	62	1,994	274	805	3,136	333	3,927	2,302	179	56	6,797	493	2,993	14,901
Other Fuels <sup>2</sup>	0	0	0	0	76	0	0	76	0	18	0	0	0	18	2	70	167
Natural Gas (million cubic feet)	1,476	275	1,751	69	4,032	84	3,245	7,431	2,716	20,639	8,168	889	146	32,538	1,004	7,424	50,148
Coal (thousand short tons)	0	11	11	0	0	0	0	0	0	0	0	0	0	0	0	0	11
Purchased Electricity (million kWh)	226	40	266	13	391	47	509	960	76	355	441	20	26	918	131	779	3,053
Purchased Steam (million pounds)	600	5	605	0	145	0	0	145	0	0	0	536	0	536	0	710	1,996

<sup>1</sup> Includes liquefied refinery gases.

<sup>2</sup> Includes small quantities of other petroleum products (e.g., unfinished oils, kerosene, etc.) consumed at refineries.

(s) Less than 500 barrels except where noted.

Note: Total may not equal sum of components due to independent rounding.

Source: See Explanatory Notes on Data Collection and Estimation.

Table 20. Imports of Crude Oil and Petroleum Products by PAD District, October 1982  
(Thousands of Barrels)

Commodity	Petroleum Administration for Defense Districts					
	I	II	III	IV	V	Total
<b>Crude Oil (including lease condensate) <sup>1 2</sup></b>	<b>28,582</b>	<b>16,406</b>	<b>59,825</b>	<b>1,629</b>	<b>6,279</b>	<b>112,721</b>
<b>Natural Gas Liquids</b>						
Natural Gasoline and Isopentane	320	3,988	2,191	528	446	7,473
Plant Condensate	1	0	1,389	0	0	1,390
Liquefied Petroleum Gases and Ethane	0	0	0	59	0	59
Ethane	319	3,988	802	468	446	6,024
Propane	0	1,105	0	0	0	1,105
Butane	265	1,890	0	234	77	2,466
Butane-Propane Mixtures	54	887	802	234	369	2,346
Ethane-Propane Mixtures	0	0	0	0	0	0
<b>Other Liquids <sup>1</sup></b>						
Unfinished Oils <sup>1</sup>	2,786	503	2,999	0	26	6,314
Motor Gasoline Blending Components	2,026	225	2,818	0	0	5,070
	759	277	181	0	26	1,244
<b>Finished Petroleum Products</b>						
Finished Motor Gasoline	27,836	565	4,732	1	2,494	35,628
Finished Leaded Motor Gasoline	4,103	3	(s)	0	1,388	5,494
Finished Unleaded Motor Gasoline	2,696	1	(s)	0	1,034	3,731
Finished Aviation Gasoline	1,408	2	0	0	354	1,763
Naphtha-Type Jet Fuel	1	0	0	0	0	1
Kerosene-Type Jet Fuel	91	0	0	0	0	91
Bonded Aircraft Fuel	534	0	0	0	0	534
Other	0	0	0	0	0	0
Kerosene	534	0	0	0	0	534
Distillate Fuel Oil	497	0	0	0	0	497
Bonded ships bunkers	2,324	0	357	1	333	3,014
For military offshore use	0	0	0	0	0	0
No. 2 fuel oil	0	0	0	0	0	0
No. 4 fuel oil	2,324	0	18	1	333	2,675
Residual Fuel Oil	0	0	339	0	0	339
Bonded ships bunkers	19,009	316	3,463	0	720	23,508
For military offshore use	0	0	0	0	0	0
Other	0	0	0	0	0	0
Naphtha < 400 Deg. for Petro. Feed. Use	19,009	316	3,463	0	720	23,508
Other Oils > 400 Deg. for Petro. Feed. Use	281	85	363	0	29	759
Special Naphthas	0	0	0	0	0	0
Lubricants	405	80	151	1	19	654
Wax	177	63	(s)	(s)	(s)	241
Asphalt	73	4	36	0	5	118
Miscellaneous Products	132	14	0	0	0	146
	210	0	363	0	0	573
<b>Total Imports</b>	<b>59,524</b>	<b>21,462</b>	<b>69,747</b>	<b>2,158</b>	<b>9,246</b>	<b>162,137</b>

<sup>1</sup> Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

<sup>2</sup> Includes crude oil imported for storage in the Strategic Petroleum Reserve.

(s) Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 21. Imports of Crude Oil and Petroleum Products by Source and PAD District, October 1982  
(Thousands of Barrels)

Source	Crude Oil 1	LPG and Ethane	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Kerosene	Distill. Fuel Oil	Resid. Fuel Oil	Special Naphthas	Other Products 2	Total Products	Total Petroleum	Total (Daily Average)
All PAD Districts														
<b>Arab OPEC</b>														
Algeria .....	3,965	0	0	0	0	0	0	0	3,401	0	362	3,763	7,728	249
Libya .....	0	0	0	0	0	0	0	206	0	0	0	206	206	7
Saudi Arabia .....	13,443	362	0	110	0	0	0	0	0	0	1,389	1,860	15,304	494
United Arab Emirates .....	1,881	0	0	0	0	0	0	0	0	0	0	0	1,881	61
Subtotal Arab OPEC .....	19,290	362	0	110	0	0	0	206	3,401	0	1,751	5,829	25,119	810
<b>Other OPEC</b>														
Ecuador .....	1,839	0	0	0	0	0	0	0	373	0	0	373	2,212	71
Gabon .....	765	0	0	0	0	0	0	0	0	0	0	0	765	25
Indonesia .....	6,740	0	0	0	240	0	0	60	4	0	0	304	7,044	227
Iran .....	3,356	0	0	0	0	0	0	0	0	0	0	0	3,356	108
Nigeria .....	9,006	0	0	0	0	0	0	0	(s)	0	0	(s)	9,006	291
Venezuela .....	6,923	63	272	265	0	0	80	229	6,548	257	747	8,460	15,384	496
Subtotal Other OPEC .....	28,629	63	272	265	240	0	80	289	6,924	257	747	9,137	37,767	1,218
<b>Other</b>														
Angola .....	1,846	0	0	0	0	0	0	0	271	0	0	271	2,118	68
Australia .....	0	333	0	0	0	0	0	0	0	0	0	333	333	11
Bahamas .....	0	0	397	0	0	0	0	0	998	0	0	1,395	1,395	45
Brazil .....	1,681	0	0	0	341	238	0	0	338	0	0	917	2,597	84
Brunei .....	0	0	0	0	43	0	0	24	0	0	0	67	67	2
Canada .....	6,561	5,173	225	306	237	0	8	285	789	174	365	7,562	14,123	456
Egypt .....	980	0	0	0	0	0	0	(s)	0	0	21	21	1,001	32
France .....	0	0	21	0	0	0	0	0	0	0	(s)	21	21	1
Mexico .....	20,742	0	0	0	(s)	0	0	24	349	4	8	385	21,127	682
Netherlands .....	0	0	178	0	1,190	0	0	0	407	0	(s)	1,775	1,775	57
Netherlands Antilles .....	0	0	849	0	0	0	0	0	3,702	0	34	4,585	4,585	148
Norway .....	6,018	0	0	0	0	0	0	0	0	0	0	0	6,018	194
Oman .....	613	0	0	0	0	0	0	0	0	0	0	0	613	20
People's Republic of China .....	295	0	0	0	1,035	0	0	7	0	0	0	1,042	1,337	43
Peru .....	357	0	0	0	514	0	0	391	258	0	0	258	615	20
Puerto Rico .....	0	0	397	0	0	0	0	0	0	0	297	1,599	1,599	52
Spain .....	0	0	0	0	0	0	0	0	0	0	(s)	(s)	(s)	(s)
Trinidad and Tobago .....	2,752	0	0	0	0	0	0	0	612	0	21	634	3,385	109
Tunisia .....	358	0	0	0	0	0	0	0	0	0	0	0	358	12
United Kingdom .....	20,301	93	0	0	0	0	0	0	243	0	(s)	336	20,637	666
Virgin Islands .....	0	0	1,729	0	1,588	387	410	1,553	2,447	0	0	8,114	8,114	262
Yugoslavia .....	0	0	0	0	0	0	0	0	0	220	0	220	220	7
Zaire .....	498	0	0	0	0	0	0	0	0	0	0	0	498	16
<b>Other Western Hemisphere</b>														
Hemisphere .....	0	0	166	49	0	0	0	0	1,414	0	(s)	1,629	1,629	53
Other Eastern Hemisphere .....	1,800	(s)	835	515	306	0	0	235	1,353	(s)	41	3,287	5,087	164
Subtotal Other .....	64,802	5,599	4,798	869	5,254	625	417	2,520	13,183	397	787	34,449	99,251	3,202
<b>Total Imports .....</b>	<b>112,721</b>	<b>6,024</b>	<b>5,070</b>	<b>1,244</b>	<b>5,494</b>	<b>625</b>	<b>497</b>	<b>3,014</b>	<b>23,508</b>	<b>654</b>	<b>3,286</b>	<b>49,415</b>	<b>162,137</b>	<b>5,230</b>

See footnotes at end of table.

Table 21. Imports of Crude Oil and Petroleum Products by Source and PAD District, October 1982  
(continued)

Source	Crude Oil 1	LPG and Ethane	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Kerosene	Distill. Fuel Oil	Resid. Fuel Oil	Special Naphthas	Other Products 2	Total Products	Total Petroleum	Total (Daily Average)
PAD District I														
<b>Arab OPEC</b>														
Algeria	1,579	0	0	0	0	0	0	0	2,310	0	0	2,310	3,889	125
Libya	0	0	0	0	0	0	0	206	0	0	0	206	206	7
Saudi Arabia	4,681	0	0	0	0	0	0	0	0	0	0	0	4,681	151
Subtotal Arab OPEC	6,260	0	0	0	0	0	0	206	2,310	0	0	2,516	8,776	283
<b>Other OPEC</b>														
Ecuador	0	0	0	0	0	0	0	0	372	0	0	372	372	12
Gabon	567	0	0	0	0	0	0	0	0	0	0	0	567	18
Nigeria	2,467	0	0	0	0	0	0	0	0	0	0	0	2,467	80
Venezuela	3,044	63	0	242	0	0	80	229	5,131	143	495	6,383	9,427	304
Subtotal Other OPEC	6,078	63	0	242	0	0	80	229	5,503	143	495	6,755	12,833	414
<b>Other</b>														
Angola	1,074	0	0	0	0	0	0	0	271	0	0	271	1,346	43
Bahamas	0	0	0	0	0	0	0	0	998	0	0	998	998	32
Brazil	365	0	0	0	341	238	0	0	338	0	0	917	1,281	41
Canada	1	256	0	2	235	0	8	285	464	42	138	1,429	1,431	46
Egypt	0	0	0	0	0	0	0	0	0	0	21	21	21	1
France	0	0	0	0	0	0	0	(s)	0	0	(s)	(s)	(s)	(s)
Mexico	3,916	0	0	0	0	0	0	0	45	0	0	45	3,961	128
Netherlands	0	0	178	0	1,190	0	0	0	407	0	(s)	1,775	1,775	57
Netherlands Antilles	0	0	849	0	0	0	0	0	3,376	0	34	4,258	4,258	137
Norway	2,650	0	0	0	0	0	0	0	0	0	0	0	2,650	85
Oman	613	0	0	0	0	0	0	0	0	0	0	0	613	20
Peru	0	0	0	0	0	0	0	0	258	0	0	258	258	8
Puerto Rico	0	0	397	0	514	0	0	391	0	0	187	1,489	1,489	48
Trinidad and Tobago	899	0	0	0	0	0	0	0	0	0	0	0	899	29
Tunisia	358	0	0	0	0	0	0	0	0	0	0	0	358	12
United Kingdom	5,568	(s)	0	0	0	0	0	0	243	0	(s)	243	5,811	187
Virgin Islands	0	0	602	0	1,588	387	410	1,214	2,408	0	0	6,608	6,608	213
Yugoslavia	0	0	0	0	0	0	0	0	0	220	0	220	220	7
Other Western Hemisphere	0	0	0	0	0	0	0	0	1,414	0	0	1,414	1,414	46
Other Eastern Hemisphere	800	(s)	0	515	236	0	0	0	973	(s)	(s)	1,724	2,524	81
Subtotal Other	16,244	256	2,026	517	4,103	625	417	1,889	11,195	262	380	21,670	37,914	1,223
<b>Total Imports</b>	<b>28,582</b>	<b>319</b>	<b>2,026</b>	<b>759</b>	<b>4,103</b>	<b>625</b>	<b>497</b>	<b>2,324</b>	<b>19,009</b>	<b>405</b>	<b>874</b>	<b>30,942</b>	<b>59,524</b>	<b>1,920</b>
PAD District II														
<b>Arab OPEC</b>														
Saudi Arabia	1,223	0	0	0	0	0	0	0	0	0	0	0	1,223	39
Subtotal Arab OPEC	1,223	0	0	0	0	0	0	0	0	0	0	0	1,223	39
<b>Other OPEC</b>														
Nigeria	3,049	0	0	0	0	0	0	0	0	0	0	0	3,049	98
Venezuela	343	0	0	0	0	0	0	0	0	0	0	0	343	11
Subtotal Other OPEC	3,393	0	0	0	0	0	0	0	0	0	0	0	3,393	109

See footnotes at end of table.

Table 21. Imports of Crude Oil and Petroleum Products by Source and PAD District, October 1982  
(Thousands of Barrels)  
(continued)

Source	Crude Oil 1	LPG and Ethane	Unfin-ished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Kero-sene	Distil. Fuel Oil	Resid. Fuel Oil	Special Naphthas	Other Prod-ucts 2	Total Prod-ucts	Total Petro-leum	Total (Daily Average)
PAD District II														
Other														
Canada	4,441	3,988	225	277	3	0	0	0	316	80	167	5,056	9,497	306
Egypt	485	0	0	0	0	0	0	0	0	0	0	0	485	16
France	0	0	0	0	0	0	0	0	0	0	(s)	(s)	(s)	(s)
Mexico	4,150	0	0	0	0	0	0	0	0	0	0	0	4,150	134
Norway	980	0	0	0	0	0	0	0	0	0	0	0	980	32
Spain	0	0	0	0	0	0	0	0	0	0	(s)	(s)	(s)	(s)
United Kingdom	1,221	(s)	0	0	0	0	0	0	0	0	0	0	1,221	39
Other Eastern Hemisphere	512	0	0	0	0	0	0	0	0	0	(s)	(s)	512	17
Subtotal Other	11,790	3,988	225	277	3	0	0	0	316	80	167	5,056	16,845	543
Total Imports	16,406	3,988	225	277	3	0	0	0	316	80	167	5,056	21,462	692
PAD District III														
Arab OPEC														
Algeria	2,386	0	0	0	0	0	0	0	1,090	0	362	1,452	3,839	124
Saudi Arabia	7,539	362	0	110	0	0	0	0	0	0	1,389	1,860	9,399	303
United Arab Emirates	1,881	0	0	0	0	0	0	0	0	0	0	0	1,881	61
Subtotal Arab OPEC	11,806	362	0	110	0	0	0	0	1,090	0	1,751	3,313	15,119	488
Other OPEC														
Ecuador	1,839	0	0	0	0	0	0	0	(s)	0	0	(s)	1,839	59
Gabon	198	0	0	0	0	0	0	0	0	0	0	0	198	6
Indonesia	1,553	0	0	0	0	0	0	0	0	0	0	0	1,553	50
Iran	3,356	0	0	0	0	0	0	0	0	0	0	0	3,356	108
Nigeria	3,490	0	0	0	0	0	0	0	(s)	0	0	(s)	3,490	113
Venezuela	3,228	0	272	23	0	0	0	0	1,417	114	253	2,077	5,305	171
Subtotal Other OPEC	13,664	0	272	23	0	0	0	0	1,417	114	253	2,078	15,742	508
Other														
Angola	772	0	0	0	0	0	0	0	0	0	0	0	772	25
Australia	0	333	0	0	0	0	0	0	0	0	0	333	333	11
Bahamas	0	0	397	0	0	0	0	0	0	0	0	397	397	13
Brazil	1,316	0	0	0	0	0	0	0	0	0	0	0	1,316	42
Canada	0	14	0	0	0	0	0	0	0	33	0	47	47	2
Egypt	495	0	0	0	0	0	0	0	0	0	0	0	495	16
France	0	0	21	0	0	0	0	0	0	0	0	21	21	1
Mexico	12,676	0	0	0	(s)	0	0	17	304	4	3	327	13,004	419
Norway	2,389	0	0	0	0	0	0	0	0	0	0	0	2,389	77
Peru	357	0	0	0	0	0	0	0	0	0	0	0	357	12
Puerto Rico	0	0	0	0	0	0	0	0	0	0	110	110	110	4
Trinidad and Tobago	1,852	0	0	0	0	0	0	0	612	0	21	634	2,486	80
United Kingdom	13,511	93	0	0	0	0	0	0	0	0	(s)	93	13,604	439
Virgin Islands	0	0	1,127	0	0	0	0	339	39	0	0	1,505	1,505	49
Zaire	498	0	0	0	0	0	0	0	0	0	0	0	498	16
Other Western Hemisphere	0	0	166	49	0	0	0	0	0	0	(s)	215	215	7

See footnotes at end of table.

Table 21. Imports of Crude Oil and Petroleum Products by Source and PAD District, October 1982  
(continued)

Source	Crude Oil 1	LPG and Ethane	Unfin-ished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Kero-sene	Distil. Fuel Oil	Resid. Fuel Oil	Special Naphthas	Other Prod-ucts 2	Total Prod-ucts	Total Petro-leum	Total (Daily Average)
PAD District III														
Other														
Other Eastern Hemisphere	487	0	835	0	0	0	0	1	0	0	12	849	1,336	43
Subtotal Other	34,355	440	2,547	49	(s)	0	0	357	956	37	147	4,531	38,886	1,254
Total Imports	59,825	802	2,818	181	(s)	0	0	357	3,463	151	2,150	9,922	69,747	2,250
PAD District IV														
Other														
Canada	1,629	468	0	0	0	0	0	1	0	1	60	529	2,158	70
Subtotal Other	1,629	468	0	0	0	0	0	1	0	1	60	529	2,158	70
Total Imports	1,629	468	0	0	0	0	0	1	0	1	60	529	2,158	70
PAD District V														
Other OPEC														
Indonesia	5,187	0	0	0	240	0	0	60	4	0	0	304	5,491	177
Venezuela	308	0	0	0	0	0	0	0	0	0	0	0	308	10
Subtotal Other OPEC	5,495	0	0	0	240	0	0	60	4	0	0	304	5,799	187
Other														
Brunei	0	0	0	0	43	0	0	24	0	0	0	67	67	2
Canada	489	446	0	26	0	0	0	0	9	19	(s)	501	990	32
Mexico	0	0	0	0	0	0	0	8	0	0	5	13	13	(s)
Netherlands Antilles	0	0	0	0	0	0	0	0	0	0	0	326	326	11
People's Republic of China	295	0	0	0	1,035	0	0	7	0	0	0	1,042	1,337	43
Other Eastern Hemisphere	0	0	0	0	71	0	0	235	380	0	29	714	714	23
Subtotal Other	784	446	0	26	1,148	0	0	273	716	19	34	2,663	3,447	111
Total Imports	6,279	446	0	26	1,388	0	0	333	720	19	34	2,967	9,246	298

1 Includes crude oil imported for storage in the Strategic Petroleum Reserve.

2 Includes aviation gasoline, waxes, asphalt, lubricants, natural gasoline, isopentane, plant condensate, naphthas less than 400 degrees F, other oils greater than 400 degrees F and miscellaneous products.

(s) Less than 500 barrels or less than 500 barrels per day.

Note: Total may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 22. Exports of Crude Oil and Petroleum Products by PAD District, October 1982  
(Thousands of Barrels)

Commodity	Petroleum Administration for Defense Districts					
	I	II	III	IV	V	Total
Crude Oil (including lease condensate) <sup>1</sup>	0	2,505	0	0	5,879	8,384
Liquefied Petroleum Gases and Ethane	55	1,414	915	0	141	2,526
Ethane	(s)	0	(s)	0	0	(s)
Propane	18	567	532	0	57	1,174
Butane	37	847	384	0	84	1,352
Butane-Propane Mixtures	0	0	0	0	0	0
Finished Motor Gasoline	2	48	396	0	7	452
Naphtha-Type Jet Fuel	(s)	0	0	0	(s)	(s)
Kerosene-Type Jet Fuel	0	0	0	0	35	35
Kerosene	(s)	0	(s)	0	(s)	1
Distillate Fuel Oil	1	0	851	0	1,191	2,042
Residual Fuel Oil	(s)	0	4,984	0	2,265	7,249
Naphtha < 400 Deg. for Petrochem. Feedstock	58	3	32	1	2	95
Other Oils > 400 Deg. for Petrochem. Feedstock	1	27	843	0	1	873
Special Naphthas	3	1	90	0	2	96
Lubricants	226	17	270	1	49	563
Wax	7	(s)	8	0	2	18
Petroleum Coke	500	263	3,078	0	2,680	6,520
Asphalt	8	1	2	1	2	13
Miscellaneous Products	12	(s)	6	(s)	5	23
Total Product Exports	872	1,775	11,474	2	6,384	20,507
Total Exports	872	4,279	11,474	2	12,263	28,890

<sup>1</sup> Exports of crude oil are prohibited under normal circumstances. Some crude oil is shipped to Canada in exchange on a barrel-for-barrel basis. Shipments of crude oil to Puerto Rico and the Virgin Islands are not prohibited because these territories are U.S. possessions.

(s) Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation.



Table 23. Exports of Crude Oil and Petroleum Products by Destination, October 1982  
(Thousands of Barrels)

Destination	Crude Oil 1	LPG and Ethane	Finished Motor Gasoline	Jet Fuel	Dist. Fuel Oil	Residual Fuel Oil	Special Naphthas	Lubricants	Wax	Petroleum Coke	Asphalt	Other	Total	Total (Daily Average)
Argentina	0	0	0	0	0	0	0	12	(S)	0	0	(S)	12	(S)
Australia	0	1	0	0	0	0	0	2	(S)	117	(S)	2	123	4
Bahamas	0	1	2	(S)	(S)	370	0	3	0	0	0	50	426	14
Bahrain	0	2	0	0	0	0	0	0	0	0	0	(S)	2	(S)
Belgium & Luxembourg	0	1	0	0	0	0	(S)	28	(S)	212	(S)	1	243	8
Brazil	0	142	0	0	0	0	0	(S)	0	0	0	1	144	5
Cameroon	0	0	0	0	0	3	0	(S)	0	0	0	0	3	(S)
Canada	2,505	1,432	48	0	0	301	3	50	3	277	2	54	4,675	151
Chile	0	0	0	0	0	188	(S)	1	(S)	(S)	0	1	190	6
China (Taiwan)	0	2	0	0	0	0	(S)	10	(S)	0	0	1	13	(S)
Colombia	0	(S)	0	0	0	0	(S)	6	(S)	0	0	2	9	(S)
Costa Rica	0	12	0	0	0	0	(S)	5	(S)	0	0	0	17	1
Denmark	0	0	0	0	0	0	0	(S)	(S)	109	0	0	110	4
Dominican Republic	0	0	0	0	0	0	0	(S)	(S)	0	0	0	1	(S)
Ecuador	0	35	52	0	0	0	0	(S)	(S)	0	0	0	88	3
Egypt	0	0	0	0	0	0	0	(S)	(S)	0	0	1	(S)	(S)
El Salvador	0	(S)	0	0	0	0	0	1	0	0	0	(S)	2	(S)
Finland	0	0	0	0	0	0	0	(S)	0	0	0	(S)	(S)	(S)
France	0	0	0	0	0	0	0	(S)	0	0	(S)	0	(S)	(S)
French Pacific Isl.	0	58	0	0	384	539	9	(S)	1	730	0	214	1,936	62
Ghana	0	0	0	0	68	319	(S)	(S)	0	0	(S)	0	387	12
Greece	0	0	0	0	0	0	0	(S)	0	26	0	0	26	1
Guatemala	0	2	0	0	0	0	0	1	2	0	0	(S)	3	(S)
Guinea	0	0	0	0	0	0	0	5	0	(S)	0	(S)	7	(S)
Honduras	0	0	0	0	0	0	0	7	(S)	0	0	0	1	(S)
Hong Kong	0	(S)	(S)	0	0	0	0	0	0	0	0	(S)	7	(S)
India	0	(S)	0	0	0	0	(S)	2	(S)	0	0	(S)	2	(S)
Indonesia	0	(S)	0	0	0	0	0	1	(S)	0	0	3	5	(S)
Iran	0	0	0	0	(S)	0	(S)	15	(S)	0	(S)	1	16	1
Israel	0	0	0	0	0	0	0	(S)	0	0	0	0	(S)	(S)
Italy	0	87	0	0	0	0	(S)	1	(S)	0	0	(S)	1	(S)
Ivory Coast	0	0	0	0	0	589	(S)	1	(S)	513	0	430	1,619	52
Jamaica	0	0	0	0	0	0	(S)	(S)	0	(S)	(S)	1	1	(S)
Japan	0	(S)	0	0	0	0	(S)	(S)	0	0	0	5	2,156	70
Jordan	0	14	0	0	78	434	7	80	2	1,538	0	(S)	1	(S)
Korea, Republic of	0	0	0	0	0	0	0	1	0	0	0	3	408	13
Kuwait	0	1	0	0	86	229	0	2	(S)	81	7	1	2	(S)
Lebanon	0	0	0	0	0	0	0	1	0	0	0	0	1	(S)
Liberta	0	0	0	0	0	0	0	(S)	0	0	0	0	(S)	(S)
Malaysia	0	0	0	0	0	0	0	1	0	0	0	(S)	1	(S)
Mexico	0	324	350	36	0	234	3	33	(S)	14	0	1	995	32
Netherlands	0	132	0	0	20	1,455	3	17	(S)	725	(S)	24	2,376	77
Netherlands Antilles	0	1	0	0	15	818	0	1	0	0	0	0	835	27
New Zealand	0	(S)	0	0	165	0	0	1	(S)	95	(S)	1	262	8
Nicaragua	0	(S)	0	0	0	0	0	0	0	0	0	0	(S)	(S)
Nigeria	0	(S)	0	0	0	0	0	2	(S)	0	0	(S)	3	(S)
Norway	0	(S)	0	0	0	0	0	(S)	0	130	0	1	131	4
Pacific Trust Terr.	0	0	0	0	0	0	0	(S)	0	0	0	1	1	(S)
Panama	0	0	0	0	90	431	(S)	2	(S)	0	0	(S)	524	17
Peru	0	(S)	0	0	0	0	0	1	(S)	0	0	1	2	(S)
Philippines	0	1	0	0	0	0	(S)	6	(S)	0	0	1	8	(S)

See footnotes at end of table.

Table 23. Exports of Crude Oil and Petroleum Products by Destination, October 1982  
(Thousands of Barrels)  
(continued)

Destination	Crude Oil <sup>1</sup>	LPG and Ethane	Finished Motor Gasoline	Jet Fuel	Dist. Fuel Oil	Residual Fuel Oil	Special Naphthas	Lubricants	Wax	Petroleum Coke	Asphalt	Other	Total	Total (Daily Average)
Puerto Rico .....	2,016	11	0	0	0	489	59	12	1	0	0	9	2,598	84
Rep. of South Africa .....	0	0	0	0	0	0	(s)	1	2	0	0	1	5	(s)
Saudi Arabia .....	0	1	0	0	(s)	0	(s)	21	0	0	1	2	26	1
Singapore .....	0	2	0	0	0	631	(s)	3	(s)	0	0	(s)	637	21
Spain .....	0	0	0	0	443	0	0	(s)	(s)	1,490	0	1	1,935	62
Surinam .....	0	0	0	0	0	0	0	(s)	0	10	0	(s)	10	(s)
Sweden .....	0	97	0	0	431	0	0	2	(s)	81	0	57	668	22
Switzerland .....	0	2	0	0	262	0	(s)	1	(s)	0	0	(s)	264	9
Thailand .....	0	0	0	0	0	0	(s)	3	0	0	0	(s)	3	(s)
Trinidad and Tobago .....	0	(s)	0	0	0	(s)	10	14	(s)	0	0	(s)	24	1
Turkey .....	0	0	0	0	0	0	0	0	0	0	0	0	0	0
United Arab Emirates .....	0	(s)	0	0	0	0	0	(s)	0	0	0	(s)	1	(s)
United Kingdom .....	0	3	0	0	(s)	220	0	86	(s)	151	0	(s)	460	15
U.S.S.R. ....	0	0	0	0	0	0	0	106	0	33	0	14	153	5
Uruguay .....	0	0	0	0	0	0	0	(s)	0	0	0	(s)	(s)	(s)
Venezuela .....	0	3	(s)	0	0	0	(s)	1	1	78	(s)	2	86	3
Virgin Islands .....	3,300	0	0	0	0	0	0	0	0	0	0	0	3,300	106
West Germany .....	0	0	0	0	0	0	0	1	1	69	0	99	170	5
Yugoslavia .....	0	0	0	0	0	0	0	1	0	39	0	(s)	40	1
Other .....	563	157	(s)	0	0	(s)	(s)	8	(s)	0	0	3	731	24
Total .....	8,384	2,526	452	36	2,042	7,249	96	563	18	6,520	13	991	28,890	932

<sup>1</sup> Exports of crude oil are prohibited under normal circumstances. Some crude oil is shipped to Canada in exchange, on a barrel-for-barrel basis. Shipments of crude oil to Puerto Rico and the Virgin Islands are not prohibited because these territories are U.S. possessions.

(s) Less than 500 barrels or less than 500 barrels per day.

Note: Total may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 24. Stocks of Crude Oil and Petroleum Products by PAD District, October 31, 1982  
(Thousands of Barrels)

Commodity	PAD District I			PAD District II					PAD District III					PAD		United States	
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill.	Ky.	Minn., Wisc., Dak.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	PAD District III		PAD Dist. IV Rocky Mt.	PAD Dist. V West Coast		
												La. Gulf Coast	No. La., Ark.				New Mexico
Crude Oil (incl. lease condensate) <sup>1)</sup>																	
Refinery .....	—	—	15,391	—	—	—	—	—	14,439	—	—	—	—	47,394	1,555	25,509	104,288
Tank Farms and Pipelines .....	—	—	2,875	—	—	—	—	—	58,143	—	—	—	—	93,649	8,836	32,172	195,675
Leases .....	—	—	61	—	—	—	—	—	1,579	—	—	—	—	17,096	1,402	1,824	21,962
Strategic Petroleum Reserve <sup>2)</sup> .....	—	—	0	—	—	—	—	—	0	—	—	—	—	284,592	0	0	284,592
Alaskan In-Transit .....	—	—	0	—	—	—	—	—	0	—	—	—	—	0	0	28,777	28,777
Total .....	—	—	18,327	—	—	—	—	—	74,161	—	—	—	—	442,731	11,793	88,282	635,294
Petroleum Products																	
Refinery .....	42,650	3,308	45,958	1,013	43,548	5,562	20,879	71,002	9,869	81,735	48,764	5,450	1,286	147,104	11,696	62,393	338,153
Bulk Terminal .....	133,178	7,047	140,225	3,906	40,144	8,635	12,073	64,758	5,696	36,054	7,741	4,734	518	54,743	2,837	20,226	282,789
Pipeline .....	26,504	2,588	29,092	1,482	12,703	3,696	16,750	34,631	8,092	8,494	8,489	13,834	1,058	39,967	2,548	4,389	110,627
Natural Gas Processing Plant .....	493	756	1,249	0	2,219	231	17,139	19,589	5,679	23,459	10,423	4,085	1,144	44,789	306	940	66,873
Total .....	202,825	13,699	216,524	6,401	98,614	18,124	66,841	189,980	29,336	149,742	75,417	28,103	4,006	286,603	17,387	87,948	798,442
Natural Gasoline and Isopentane																	
Refinery .....	6	0	6	0	8	72	93	173	40	266	127	0	12	445	1	30	655
Pipeline .....	0	0	0	0	30	22	203	255	282	65	0	144	84	575	185	5	1,020
Natural Gas Processing Plant .....	6	16	22	0	28	14	745	787	531	2,696	524	21	43	3,815	51	24	4,699
Total .....	12	16	28	0	66	108	1,041	1,215	853	3,027	651	165	139	4,835	237	59	6,374
Unfractionated Stream																	
Pipeline .....	0	0	0	0	78	0	11	89	0	28	28	0	0	56	0	0	145
Natural Gas Processing Plant .....	0	0	0	0	101	2	1,624	1,727	262	879	116	2	341	1,600	28	2	3,357
Total .....	0	0	0	0	179	2	1,635	1,816	262	907	144	2	341	1,656	28	2	3,502
Plant Condensate																	
Refinery .....	0	0	0	0	1	0	0	1	11	57	0	97	0	165	0	0	166
Pipeline .....	0	0	0	0	0	0	0	0	864	305	55	5	17	1,246	0	0	1,246
Natural Gas Processing Plant .....	0	0	0	0	1	0	4	5	35	35	6	9	1	86	12	0	102
Total .....	0	0	0	0	2	0	4	6	910	397	61	111	18	1,497	12	0	1,514
Ethane																	
Refinery .....	0	0	0	0	9	0	0	9	0	281	0	0	0	281	0	0	290
Bulk Terminal .....	0	0	0	0	60	0	54	114	0	1,089	0	0	0	1,089	0	0	1,203
Pipeline .....	0	0	0	0	35	686	109	830	178	75	108	0	3	364	0	0	1,194
Natural Gas Processing Plant .....	0	0	0	0	24	0	350	374	193	1,609	296	1	0	2,099	(9)	0	2,473
Total .....	0	0	0	0	128	686	513	1,327	371	3,054	404	1	3	3,833	(9)	0	5,160
Propane for Petrochemical Feedstock Use																	
Refinery .....	55	0	55	0	107	0	1	108	0	8	434	0	0	442	0	0	605
Total .....	55	0	55	0	107	0	1	108	0	8	434	0	0	442	0	0	605
Propane for Other Uses																	
Refinery .....	507	2	509	3	1,091	21	230	1,345	103	684	845	7	5	1,644	191	195	3,884
Bulk Terminal .....	640	0	640	0	919	70	536	1,525	264	12,954	55	403	0	13,676	41	0	15,882
Pipeline .....	856	1,446	2,302	59	1,248	469	1,912	3,688	613	79	243	546	152	1,633	115	0	7,738
Natural Gas Processing Plant .....	443	733	1,176	0	1,918	205	11,254	13,377	2,791	6,314	5,303	3,795	270	18,473	171	379	33,576
Total .....	2,446	2,181	4,627	62	5,176	765	13,932	19,935	3,771	20,031	6,446	4,751	427	35,426	518	574	61,080

See footnotes at end of table.

Table 24. Stocks of Crude Oil and Petroleum Products by PAD District, October 31, 1982  
(Thousands of Barrels) (continued)

Commodity	PAD District I			PAD District II					PAD District III				PAD District IV		United States				
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill.	Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas		La. Gulf Coast	No. La., Ark.	New Mexico		Total	Dist. IV Rocky Mt.	PAD	
										Inland	Gulf Coast							West Coast	Dist. V Coast
<b>Butane for Petro. Feed. Use</b>																			
Refinery .....	1	0	1	0	0	0	12	0	12	0	30	0	3	0	33	0	4	50	
Total .....	1	0	1	0	0	0	12	0	12	0	30	0	3	0	33	0	4	50	
<b>Butane for Other Uses</b>																			
Refinery .....	216	0	216	296	281	52	240	869	144	542	1,322	3	3	2,014	113	587	3,799		
Bulk Terminal .....	319	0	319	0	463	0	70	533	150	4,049	0	0	0	4,199	0	0	5,051		
Pipeline .....	33	96	129	0	987	0	372	1,359	954	39	5	100	87	1,185	135	0	2,808		
Natural Gas Processing Plant .....	23	4	27	0	58	9	1,305	1,373	1,191	4,809	2,885	99	101	9,085	41	501	11,027		
Total .....	591	100	691	296	1,789	61	1,987	4,134	2,439	9,439	4,212	202	191	16,483	289	1,088	22,685		
<b>Butane-Propane Mixtures for Petro. Feed. Use</b>																			
Refinery .....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Total .....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
<b>Butane-Propane Mixtures for Other Uses</b>																			
Refinery .....	0	0	0	0	0	0	0	0	1	9	18	0	15	43	1	328	372		
Bulk Terminal .....	0	0	0	0	198	0	1	199	0	1	0	0	0	1	0	0	200		
Pipeline .....	0	0	0	0	0	0	15	15	635	24	10	0	1	670	0	0	685		
Natural Gas Processing Plant .....	0	0	0	0	3	0	68	71	21	3	(s)	2	0	26	(s)	5	102		
Total .....	0	0	0	0	201	0	84	285	657	37	28	2	16	740	1	333	1,359		
<b>Ethane-Propane Mixtures</b>																			
Bulk Terminal .....	0	0	0	0	0	0	6	6	327	1,250	0	0	0	1,577	0	0	1,583		
Pipeline .....	0	0	0	0	66	0	455	521	601	85	2	0	92	780	105	0	1,406		
Natural Gas Processing Plant .....	0	0	0	0	0	0	853	853	244	3,972	0	0	294	4,510	0	0	5,363		
Total .....	0	0	0	0	66	0	1,314	1,380	1,172	5,307	2	0	386	6,867	105	0	8,352		
<b>Isobutane</b>																			
Refinery .....	0	18	18	31	80	11	164	286	96	168	526	11	6	807	28	35	1,174		
Bulk Terminal .....	0	0	0	0	70	0	29	99	141	1,905	0	0	0	2,046	0	0	2,145		
Pipeline .....	0	0	0	0	563	0	117	680	219	31	0	100	57	407	43	0	1,130		
Natural Gas Processing Plant .....	3	3	6	0	82	1	936	1,019	190	2,191	1,291	62	93	3,827	2	29	4,882		
Total .....	3	21	24	31	795	12	1,246	2,084	646	4,295	1,817	173	156	7,087	73	64	9,331		
<b>Other Hydrocarbons and Alcohol</b>																			
Refinery .....	0	19	19	0	50	0	0	50	1	70	46	0	0	117	0	5	191		
Total .....	0	19	19	0	50	0	0	50	1	70	46	0	0	117	0	5	191		
<b>Unfinished Oils</b>																			
Refinery .....	3,159	415	3,574	55	2,691	146	1,216	4,108	1,154	5,986	4,453	182	133	11,908	464	5,070	25,124		
Naphthas and Lighter .....	1,886	8	1,894	0	2,253	8	1,022	3,283	547	6,987	1,285	25	11	8,855	396	4,382	18,810		
Kerosene and Lighter Gas Oils .....	7,189	448	7,637	88	5,700	349	2,120	8,257	874	12,738	6,727	800	151	21,290	1,563	10,909	49,656		
Heavy Gas Oils .....	1,669	243	1,912	3	3,133	45	1,489	4,670	338	4,216	2,939	44	0	7,537	425	5,204	19,748		
Residuum .....	13,903	1,114	15,017	146	13,777	548	5,847	20,318	2,913	29,927	15,404	1,051	295	49,590	2,848	25,565	113,338		
Total .....																			

See footnotes at end of table.

Table 24. Stocks of Crude Oil and Petroleum Products by PAD District, October 31, 1982  
(Thousands of Barrels) (continued)

Commodity	PAD District I				PAD District II				PAD District III				PAD District IV		United States		
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Dak.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total			
Motor Gasoline Blending Components																	
Refinery .....	4,245	81	4,326	26	5,768	589	1,875	8,258	1,497	9,853	7,317	106	112	18,885	1,648	8,143	41,260
Bulk Terminal .....	235	0	235	6	131	2	102	241	129	46	0	0	0	175	0	236	887
Pipeline .....	0	0	0	0	17	2	86	105	6	0	0	0	0	6	0	0	111
Total .....	4,480	81	4,561	32	5,916	593	2,063	8,604	1,632	9,899	7,317	106	112	19,066	1,648	8,379	42,258
Aviation Gasoline Blending Components																	
Refinery .....	4	0	4	0	140	0	2	142	41	21	131	0	0	193	0	38	377
Total .....	4	0	4	0	140	0	2	142	41	21	131	0	0	193	0	38	377
Total Finished Motor Gasoline																	
Refinery .....	5,824	270	6,094	102	6,254	1,384	4,536	12,276	2,016	9,819	6,169	839	231	19,074	1,866	7,081	46,391
Bulk Terminal .....	34,941	3,083	38,024	1,949	18,214	4,092	5,857	30,112	2,429	5,178	1,844	2,788	347	12,586	1,776	9,574	92,072
Pipeline .....	14,100	729	14,829	752	6,437	1,182	7,644	16,015	1,720	5,154	4,806	7,219	175	19,074	1,152	2,544	53,614
Natural Gas Processing Plant .....	18	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	18
Total Finished Motor Gasoline .....	54,883	4,082	58,965	2,803	30,905	6,658	18,037	58,403	6,165	20,151	12,819	10,846	753	50,734	4,794	19,199	192,095
Finished Leaded Motor Gasoline																	
Refinery .....	2,474	168	2,642	52	2,883	838	2,514	6,287	1,075	4,681	2,933	685	113	9,487	1,168	3,118	22,702
Bulk Terminal .....	16,264	1,500	17,764	991	8,719	2,374	3,616	15,700	1,234	3,101	848	1,386	201	6,770	955	4,882	46,071
Pipeline .....	6,780	373	7,153	364	3,031	654	4,317	8,366	847	2,175	1,704	3,610	90	8,426	751	1,257	25,953
Natural Gas Processing Plant .....	18	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	18
Total .....	25,536	2,041	27,577	1,407	14,633	3,866	10,447	30,353	3,156	9,957	5,485	5,681	404	24,683	2,874	9,257	94,744
Finished Unleaded Motor Gasoline																	
Refinery .....	3,350	102	3,452	50	3,371	546	2,022	5,989	941	5,138	3,236	154	118	9,587	697	3,959	23,684
Bulk Terminal .....	18,675	1,583	20,258	958	9,456	1,718	2,238	14,370	1,195	2,077	996	1,402	146	5,816	821	4,692	45,957
Pipeline .....	7,320	356	7,676	388	3,406	527	3,327	7,648	873	2,979	3,102	3,609	85	10,648	401	1,287	27,660
Total .....	29,345	2,041	31,386	1,396	16,233	2,791	7,587	28,007	3,009	10,194	7,334	5,165	349	26,051	1,919	9,938	97,301
Gasohol																	
Refinery .....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	5
Bulk Terminal .....	2	0	2	0	39	0	3	42	0	0	0	0	0	0	0	0	44
Pipeline .....	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total .....	2	0	2	0	39	1	3	43	0	0	0	0	0	0	1	4	50
Finished Aviation Gasoline																	
Refinery .....	17	0	17	0	92	0	41	133	17	373	115	0	0	505	35	224	914
Bulk Terminal .....	285	19	304	0	220	29	67	316	36	5	7	19	50	117	22	401	1,160
Pipeline .....	5	0	5	0	13	0	45	58	20	1	0	0	0	21	0	0	84
Natural Gas Processing Plant .....	0	0	0	0	0	0	0	0	54	0	0	0	0	54	0	0	54
Total .....	307	19	326	0	325	29	153	507	127	379	122	19	50	697	57	625	2,212
Naphtha-Type Jet Fuel																	
Refinery .....	161	34	195	0	451	50	329	830	329	1,052	422	173	197	2,173	208	834	4,240
Bulk Terminal .....	7	10	17	19	105	51	132	307	139	85	0	46	0	270	3	54	651
Pipeline .....	315	0	315	5	9	27	117	158	136	0	72	78	305	591	88	347	1,499
Total .....	483	44	527	24	565	128	578	1,295	604	1,137	494	297	502	3,034	299	1,235	6,390

See footnotes at end of table.

Table 24. Stocks of Crude Oil and Petroleum Products by PAD District, October 31, 1982  
(Thousands of Barrels) (continued)

Commodity	PAD District I			PAD District II					PAD District III				PAD District IV		United States		
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas		La. Gulf Coast	No. La. Ark.	New Mexico	Total		PAD Dist. IV Rocky Mts.	PAD Dist. V West Coast
									Inland	Gulf Coast							
Kerosene-Type Jet Fuel																	
Refinery .....	1,076	0	1,076	53	1,180	63	173	1,469	294	2,733	2,795	1	24	5,847	357	3,038	11,787
Bulk Terminal .....	5,337	185	5,522	64	2,870	260	612	3,806	204	1,655	52	50	27	1,988	117	1,858	13,291
Pipeline .....	2,822	114	2,936	83	474	126	1,114	1,797	813	951	864	1,347	26	4,001	135	549	9,418
Total .....	9,235	299	9,534	200	4,524	449	1,899	7,072	1,311	5,339	3,711	1,398	77	11,836	609	5,445	34,496
Kerosene																	
Refinery .....	338	50	388	0	850	41	163	1,054	58	713	586	24	37	1,418	12	140	3,012
Bulk Terminal .....	3,239	241	3,480	256	1,296	59	23	1,634	15	473	29	15	0	532	27	59	5,732
Pipeline .....	572	13	585	58	141	0	68	267	4	57	378	182	0	621	0	0	1,473
Natural Gas Processing Plant .....	0	0	0	0	0	0	0	0	2	0	0	(9)	1	3	0	0	3
Total .....	4,149	304	4,453	314	2,287	100	254	2,955	79	1,243	993	221	38	2,574	39	199	10,220
Total Distillate Fuel Oils																	
Refinery .....	8,781	362	9,143	76	8,043	1,855	4,380	14,354	1,020	10,869	5,540	1,209	187	18,825	2,111	4,244	48,677
Bulk Terminal .....	56,000	2,594	58,594	1,264	12,661	3,639	3,543	21,107	1,510	4,977	1,760	1,161	92	9,500	848	4,465	94,514
Pipeline .....	7,801	190	7,991	525	2,605	1,182	4,482	8,794	1,005	1,597	1,918	4,113	59	8,692	590	927	26,994
Natural Gas Processing Plant .....	0	0	0	0	0	0	1	1	1	0	0	0	0	1	0	0	2
Total Distillate Fuel Oil .....	72,582	3,146	75,728	1,865	23,309	6,676	12,406	44,256	3,536	17,443	9,218	6,483	338	37,018	3,549	9,636	170,187
Dist. Fuel Oils Less No. 4 Fuel Oil																	
Refinery .....	8,781	353	9,134	76	8,006	1,855	4,380	14,317	966	10,443	5,291	1,154	159	18,013	2,110	4,197	47,771
Bulk Terminal .....	54,666	2,593	57,259	1,252	12,607	3,560	3,543	20,962	1,491	4,977	1,747	1,160	92	9,467	848	4,437	92,973
Pipeline .....	7,801	190	7,991	525	2,605	1,182	4,482	8,794	1,005	1,597	1,918	4,113	59	8,692	590	927	26,994
Natural Gas Processing Plant .....	0	0	0	0	0	0	1	1	1	0	0	0	0	1	0	0	2
Total .....	71,248	3,136	74,384	1,853	23,218	6,597	12,406	44,074	3,463	17,017	8,956	6,427	310	36,173	3,548	9,561	167,740
No. 4 Fuel Oil																	
Refinery .....	0	9	9	0	37	0	0	37	54	426	249	55	28	812	1	47	906
Bulk Terminal .....	1,334	1	1,335	12	54	79	0	145	19	0	13	1	0	33	0	28	1,541
Total .....	1,334	10	1,344	12	91	79	0	182	73	426	262	56	28	845	1	75	2,447
Residual Fuel Oils																	
Refinery .....	3,211	86	3,297	73	1,870	311	227	2,481	374	5,309	3,122	486	76	9,367	545	7,054	22,744
Bulk Terminal .....	29,050	427	29,477	198	1,472	153	770	2,593	342	2,246	3,569	58	0	6,215	0	2,527	40,812
Pipeline .....	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	17	18
Total .....	32,261	513	32,774	271	3,342	464	997	5,074	716	7,556	6,691	544	76	15,583	545	9,598	63,574
Naphtha < 400 Deg. Petro. Feedstock																	
Refinery .....	99	0	99	0	72	0	61	133	131	883	306	6	0	1,326	0	252	1,810
Total .....	99	0	99	0	72	0	61	133	131	883	306	6	0	1,326	0	252	1,810
Other Oils > 400 Deg. Petro. Feedstock																	
Refinery .....	3	0	3	0	177	0	1	178	183	1,153	230	30	0	1,596	0	429	2,206
Total .....	3	0	3	0	177	0	1	178	183	1,153	230	30	0	1,596	0	429	2,206
Special Naphthas																	
Refinery .....	192	38	230	0	214	0	204	418	47	1,302	87	128	0	1,564	10	242	2,464
Bulk Terminal .....	792	28	820	48	148	9	0	205	0	120	0	27	0	147	0	42	1,214
Natural Gas Processing Plant .....	0	0	0	0	0	0	0	0	124	0	0	0	0	124	0	0	124
Total .....	984	66	1,050	48	362	9	204	623	171	1,422	87	155	0	1,835	10	284	3,802

See footnotes at end of table.

Table 24. Stocks of Crude Oil and Petroleum Products by PAD District, October 31, 1982  
(Thousands of Barrels) (continued)

Commodity	PAD District I			PAD District II					PAD District III					PAD District IV			United States	
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill.	Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total	Rocky Mts.		Dist. IV West Coast
<b>Lubricants</b>																		
Refinery	49	417	466	0	49	0	0	47	96	0	224	73	0	0	0	297	5	40
Bright Stock	396	401	797	0	482	0	0	452	934	0	1,799	1,001	85	0	2,885	67	588	
Neutral	640	162	802	0	156	0	0	126	282	40	2,177	214	172	0	2,603	8	110	
Other	833	199	1,032	15	455	14	0	47	531	10	21	241	88	2	362	3	736	
Bulk Terminals	1,918	1,179	3,097	15	1,142	14	0	672	1,843	50	4,221	1,529	345	2	6,147	83	1,474	
Total																		

1 Crude oil data are not collected by refinery district.

2 Includes 34055 thousands of barrels of domestic crude oil.

(s) Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation.

— Not Applicable.

Table 25. Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, and Barge Between PAD Districts, October 1982  
(Thousands of Barrels)

Commodity	From I to			From II to			From III to			From IV to			From V to				
	II	III	V	I	III	IV	V	I	II	IV	V	II	III	V	I	II	III
Crude Oil	0	21	0	0	0	0	0	0	406	1,252	0	0	0	0	3,291	0	18,132
Petroleum Products	7,949	381	0	3,141	6,643	2,530	0	0	87,399	28,455	0	2,044	78	963	0	0	385
Natural Gasoline and Isopentane	0	0	0	0	353	0	0	0	0	839	0	0	14	0	0	0	0
Unfractionated Stream	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Plant Condensate	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Liquefied Petroleum Gases	0	35	0	956	2,083	147	0	1,600	7,764	0	0	0	64	0	0	0	0
Unfinished Oils	7	212	0	0	0	0	0	1,473	40	0	0	0	0	0	0	0	356
Motor Gasoline Blending Components	0	0	0	0	0	0	0	0	727	0	0	0	0	0	0	0	0
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finished Motor Gasoline	5,733	0	0	1,512	1,981	1,614	0	48,327	12,820	0	912	476	0	649	0	0	0
Finished Leaded Motor Gasoline	3,283	0	0	676	1,203	880	0	21,389	6,398	0	568	305	0	479	0	0	0
Finished Unleaded Motor Gasoline	2,450	0	0	836	778	734	0	26,938	6,422	0	344	171	0	170	0	0	0
Gasohol	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finished Aviation Gasoline	13	0	0	0	0	14	0	174	140	0	40	0	0	0	0	0	0
Naphtha-Type Jet Fuel	99	0	0	20	51	0	0	438	59	0	87	11	0	46	0	0	0
Kerosene-Type Jet Fuel	263	0	0	155	100	631	0	7,902	1,511	0	188	3	0	36	0	0	0
Kerosene	94	0	0	0	0	0	0	788	131	0	0	0	0	0	0	0	0
Distillate Fuel Oil	1,678	0	0	151	1,008	124	0	21,781	3,196	0	425	334	0	232	0	0	0
Distillate Fuel Oil Less No. 4	1,678	0	0	151	831	124	0	21,431	3,196	0	425	334	0	232	0	0	0
No. 4 Fuel Oil	0	0	0	0	177	0	0	350	0	0	0	0	0	0	0	0	0
Residual Fuel Oil	0	101	0	13	995	0	0	3,175	287	0	373	0	0	0	0	0	0
Naphtha and Other Oils for Petro.	62	0	0	43	34	0	0	29	42	0	0	0	0	0	0	0	0
Feedstock	0	0	0	17	0	0	0	269	106	0	0	0	0	0	0	0	0
Special Naphthas	0	15	0	65	38	0	0	754	279	0	19	0	0	0	0	0	29
Lubricants	0	10	0	9	0	0	0	20	0	0	0	0	0	0	0	0	0
Wax	0	0	0	110	0	0	0	233	385	0	0	0	0	0	0	0	0
Asphalt and Road Oil	0	0	0	90	0	0	0	436	128	0	0	0	0	0	0	0	0
Miscellaneous Products	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total All Products	7,949	402	0	3,141	6,643	2,530	0	87,805	29,707	0	2,044	1,340	78	963	3,291	0	18,517

Note: Total may not equal sum of components due to independent rounding.  
Sources: See Explanatory Notes on Data Collection and Estimation.



Table 26. Movements of Petroleum Products by Pipeline Between PAD Districts, October 1982  
(Thousands of Barrels)

Commodity	From I to			From II to			From III to			From IV to		
	II	I	III	IV	I	II	IV	V	II	III	V	
Natural Gasoline and Isopentane .....	0	0	353	0	0	839	0	0	382	14	0	
Unfractionated Stream .....	0	0	0	0	0	0	0	0	0	0	0	
Plant Condensate .....	0	0	0	0	0	1	0	0	0	0	0	
Liquefied Petroleum Gases .....	0	956	2,083	147	1,421	7,764	0	0	134	64	0	
Motor Gasoline Blending Components .....	0	0	0	0	0	727	0	0	0	0	0	
Aviation Gasoline Blending Components .....	0	0	0	0	0	0	0	0	0	0	0	
Finished Motor Gasoline .....	4,335	1,270	1,978	1,614	39,499	11,833	0	912	476	0	649	
Finished Leaded Motor Gasoline .....	2,555	510	1,200	880	17,294	5,912	0	568	305	0	479	
Finished Unleaded Motor Gasoline .....	1,780	760	778	734	22,205	5,921	0	344	171	0	170	
Gasohol .....	0	0	0	0	0	0	0	0	0	0	0	
Finished Aviation Gasoline .....	13	0	0	14	39	105	0	0	0	0	0	
Naphtha-Type Jet Fuel .....	0	0	51	0	199	1	0	87	11	0	46	
Kerosene-Type Jet Fuel .....	181	102	100	631	5,547	980	0	188	3	0	36	
Kerosene .....	57	0	0	0	737	131	0	0	0	0	0	
Distillate Fuel Oil .....	1,107	132	831	124	17,817	2,442	0	425	334	0	232	
Distillate Fuel Oil Less No. 4 .....	1,107	132	831	124	17,817	2,442	0	425	334	0	232	
No. 4 Fuel Oil .....	0	0	0	0	0	0	0	0	0	0	0	
Residual Fuel Oil .....	0	0	0	0	0	0	0	0	0	0	0	
Miscellaneous Products .....	0	90	0	0	0	61	0	0	0	0	0	
Total .....	5,693	2,550	5,396	2,530	65,259	24,864	0	1,612	1,340	78	963	

Note: Total may not equal sum of components due to independent rounding.  
Source: See Explanatory Notes on Data Collection and Estimation.

Table 27. Movements of Crude Oil and Petroleum Products by Tanker and Barge Between PAD Districts, October 1982  
(Thousands of Barrels)

Commodity	From I to			From II to			From III to			From V to		
	II	III	V	I	III	V	I	New Eng	Cent Atl	Low Atl	II	III
Crude Oil .....	0	21	0	0	0	0	406	0	406	0	1,252	0
Petroleum Products .....	2,256	381	0	591	1,247	0	22,140	2,335	5,529	14,276	3,571	18,132
Liquefied Petroleum Gases .....	0	35	0	0	0	0	179	0	0	179	0	385
Unfinished Oils .....	7	212	0	0	0	0	1,473	0	1,431	42	40	356
Finished Motor Gasoline .....	1,398	0	0	242	3	0	8,828	783	557	7,488	987	0
Finished Aviation Gasoline .....	0	0	0	0	0	0	135	22	10	103	35	0
Naphtha-Type Jet Fuel .....	99	0	0	20	0	0	239	7	0	232	58	0
Kerosene-Type Jet Fuel .....	82	0	0	53	0	0	2,355	193	616	1,546	531	0
Kerosene .....	37	0	0	0	0	0	51	0	28	23	0	0
Distillate Fuel Oil .....	571	0	0	19	177	0	3,964	610	1,199	2,155	754	0
Residual Fuel Oil .....	0	101	0	0	995	0	3,175	684	590	1,901	287	0
Naphtha and Other Oils for Petro. Feed. Use .....	62	0	0	43	34	0	29	32	20	9	42	0
Special Naphthas .....	0	0	0	17	0	0	269	0	167	70	106	0
Lubricants .....	0	15	0	65	38	0	754	0	531	223	279	29
Wax .....	0	10	0	9	0	0	20	0	0	20	0	0
Asphalt and Road Oil .....	0	0	0	110	0	0	233	0	8	225	385	0
Miscellaneous Products .....	0	8	0	0	0	0	436	4	372	60	67	0
Total .....	2,256	402	0	591	1,247	0	22,546	2,335	5,935	14,276	4,823	18,517

Note: Total may not equal sum of components due to independent rounding.  
Source: See Explanatory Notes on Data Collection and Estimation.

Table 28. Net Movements of Crude Oil and Petroleum Products by Pipeline, Tanker and Barge Between PAD Districts, October 1982  
(Thousands of Barrels)

Commodity	P.A.D. District I			P.A.D. District II			P.A.D. District III			P.A.D. District IV			P.A.D. District V		
	Receipts into PADD I	Shipments from PADD I	Net Receipts PADD I	Receipts into PADD II	Shipments from PADD II	Net Receipts PADD II	Receipts into PADD III	Shipments from PADD III	Net Receipts PADD III	Receipts into PADD IV	Shipments from PADD IV	Net Receipts PADD IV	Receipts into PADD V	Shipments from PADD V	Net Receipts PADD V
<b>Crude Oil</b>	3,697	21	3,676	1,252	0	1,252	18,153	1,558	16,495	0	0	0	0	21,423	-21,423
<b>Petroleum Products</b>	90,540	8,330	82,210	37,744	12,314	25,430	7,487	117,898	-110,411	2,530	2,381	149	3,007	385	2,622
Natural Gasoline	0	0	0	1,221	353	868	367	839	-472	0	396	-396	0	0	0
Unfractionated Stream	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Plant Condensate	0	0	0	1	0	1	0	0	-1	0	0	0	0	0	0
Liquefied Petroleum Gases	2,556	35	2,521	7,898	3,186	4,712	2,182	9,364	-7,182	147	198	-51	0	0	0
Unfinished Oils	1,473	219	1,254	47	0	47	588	1,513	-945	0	0	0	0	0	0
Motor Gasoline Blending Components	0	0	0	727	0	727	0	727	-727	0	0	0	0	356	-356
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finished Motor Gasoline	49,839	5,733	44,106	19,029	5,107	13,922	1,981	62,059	-60,078	1,614	1,125	489	1,561	0	1,561
Finished Leaded Motor Gasoline	22,065	3,283	18,782	9,986	2,759	7,227	1,203	28,355	-27,152	880	784	96	1,047	0	1,047
Finished Unleaded Motor Gasoline	27,774	2,450	25,324	9,043	2,348	6,695	778	33,704	-32,926	734	341	393	514	0	514
Gasohol	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finished Aviation Gasoline	174	13	161	153	14	139	0	354	-354	14	0	14	40	0	40
Naphtha-Type Jet Fuel	458	99	359	169	71	98	51	584	-533	0	57	-57	133	0	133
Kerosene-Type Jet Fuel	8,057	263	7,794	1,777	886	891	100	9,601	-9,501	631	39	592	224	0	224
Kerosene	788	94	694	225	0	225	0	919	-919	0	0	0	0	0	0
Distillate Fuel Oil	21,932	1,678	20,254	5,208	1,283	3,925	1,008	25,402	-24,394	124	566	-442	657	0	657
Distillate Fuel Oil Less No. 4	21,582	1,678	19,904	5,208	1,106	4,102	831	25,052	-24,221	124	566	-442	657	0	657
No. 4 Fuel Oil	350	0	350	0	177	-177	177	350	-173	0	0	0	0	0	0
Residual Fuel Oil	3,188	101	3,087	287	1,008	-721	1,096	3,835	-2,739	0	0	0	373	0	373
Naphtha and Other Oils for Petro.															
Feedstock Use	72	62	10	104	77	27	34	71	-37	0	0	0	0	0	0
Special Naphthas	286	0	286	106	17	89	0	375	-375	0	0	0	0	0	0
Lubricants	819	15	804	279	103	176	82	1,052	-970	0	0	0	19	29	-10
Wax	29	10	19	0	9	-9	10	20	-10	0	0	0	0	0	0
Asphalt and Road Oil	343	0	343	385	110	275	0	618	-618	0	0	0	0	0	0
Miscellaneous Products	526	8	518	128	90	38	8	564	-556	0	0	0	0	0	0
<b>Total All Products</b>	94,237	8,351	85,886	38,996	12,314	26,682	25,640	119,556	-93,916	2,530	2,381	149	3,007	21,808	-18,801

Note: Total may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation.

Note: Total may not equal sum of components due to independent rounding.  
Source: See Explanatory Notes on Data Collection and Estimation.

Table 30. Stocks of No.4 Fuel Oil and Residual Fuel Oil By Sulfur Content, October 1982  
(Thousands of Barrels)

Commodity	PAD District I			PAD District II						PAD District III				PAD District IV		United States	
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total	Rocky Mt.		Dist. V West Coast
<b>No. 4 Fuel Oil -- 0.00 to 0.30% Sulfur</b>																	
Refinery .....	0	9	9	0	1	0	0	0	1	0	134	31	3	0	168	0	178
Bulk Terminal .....	460	0	460	0	0	0	0	0	0	0	0	0	1	0	1	0	461
Total .....	460	9	469	0	1	0	0	0	1	0	134	31	4	0	169	0	639
<b>No.4 Fuel Oil -- 0.31 to 0.50% Sulfur</b>																	
Refinery .....	0	0	0	0	9	0	0	0	9	10	0	1	0	0	11	1	22
Bulk Terminal .....	37	0	37	0	0	0	0	0	0	0	0	13	0	0	13	0	50
Total .....	37	0	37	0	9	0	0	0	9	10	0	14	0	0	24	1	72
<b>No. 4 Fuel Oil -- 0.51 to 1.00% Sulfur</b>																	
Refinery .....	0	0	0	0	16	0	0	0	16	39	292	22	2	28	383	0	416
Bulk Terminal .....	415	0	415	0	54	79	0	133	0	0	0	0	0	0	0	0	548
Total .....	415	0	415	0	70	79	0	149	39	292	22	2	28	383	0	17	964
<b>No. 4 Fuel Oil -- 1.01 to 2.00% Sulfur</b>																	
Refinery .....	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	0	10
Bulk Terminal .....	345	0	345	0	0	0	0	0	0	0	0	0	0	0	0	28	373
Total .....	345	0	345	0	0	0	0	0	5	0	0	0	0	0	5	33	383
<b>No.4 Fuel Oil -- Greater Than 2.00% Sulfur</b>																	
Refinery .....	0	0	0	0	11	0	0	0	11	0	0	195	50	0	245	0	280
Bulk Terminal .....	77	1	78	12	0	0	0	12	19	0	0	0	0	0	19	0	109
Total .....	77	1	78	12	11	0	0	23	19	0	195	50	50	0	264	0	389
<b>Residual Fuel Oil -- 0.00 to 0.30% Sulfur</b>																	
Refinery .....	191	29	220	0	1	9	6	16	116	116	170	51	18	17	372	107	569
Bulk Terminal .....	5,610	0	5,610	0	25	0	0	25	0	0	1,576	7	0	1,583	0	0	1,284
Total .....	5,801	29	5,830	0	26	9	6	41	116	116	170	1,627	25	17	1,955	107	7,218
<b>Residual Fuel Oil -- 0.31 to 0.50% Sulfur</b>																	
Refinery .....	742	3	745	0	80	0	7	87	7	631	31	180	0	849	52	925	2,658
Bulk Terminal .....	2,231	0	2,231	0	241	0	0	241	0	0	0	0	0	0	0	0	2,472
Total .....	2,973	3	2,976	0	321	0	7	328	7	631	31	180	0	849	52	925	5,130
<b>Residual Fuel Oil -- 0.51 to 1.00% Sulfur</b>																	
Refinery .....	1,024	0	1,024	73	920	0	80	1,073	191	1,489	889	172	4	2,745	40	1,481	6,363
Bulk Terminal .....	7,386	157	7,543	108	627	3	138	876	88	612	91	0	0	791	0	502	9,712
Total .....	8,410	157	8,567	181	1,547	3	218	1,949	279	2,101	980	172	4	3,536	40	1,983	16,075
<b>Residual Fuel Oil -- 1.01 to 2.00% Sulfur</b>																	
Refinery .....	498	49	547	0	431	121	116	668	51	400	527	5	1	984	55	3,126	5,380
Bulk Terminal .....	3,605	247	3,852	90	447	65	420	1,022	0	373	619	0	0	992	0	1,375	7,241
Total .....	4,103	296	4,399	90	878	186	536	1,690	51	773	1,146	5	1	1,976	55	4,501	12,621
<b>Residual Fuel Oil -- Greater than 2.00% Sulfur</b>																	
Refinery .....	756	5	761	0	438	181	18	637	9	2,619	1,624	111	54	4,417	291	953	7,059
Bulk Terminal .....	10,218	23	10,241	0	132	85	212	429	254	1,261	1,283	51	0	2,849	0	650	14,169
Total .....	10,974	28	11,002	0	570	266	230	1,066	263	3,880	2,907	162	54	7,266	291	1,603	21,228
<b>Residual Fuel Oil -- Sulfur Content Not Specified</b>																	
Pipeline .....	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	17	18
Total .....	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	17	18

Note: Total may not equal sum of components due to independent rounding.

Note: Total may not equal sum of components due to independent rounding.  
Sources: See Explanatory Notes on Data Collection and Estimation.

Table 31. Imports of Residual Fuel Oil by Sulfur Content by Country of Origin, October 1982  
(Thousands of Barrels)

Country	Residual Fuel Oil						Total
	0.00 to 0.30%	0.31 to 0.50%	0.51 to 1.00%	1.01 to 2.00%	Greater Than 2.00%	Not Specified	
<b>Arab OPEC</b>							
Algeria .....	2,909	492	0	0	0	0	3,401
Iraq .....	0	0	0	0	0	0	0
Kuwait .....	0	0	0	0	0	0	0
Libya .....	0	0	0	0	0	0	0
Qatar .....	0	0	0	0	0	0	0
Saudi Arabia .....	0	0	0	0	0	0	0
United Arab Emirates .....	0	0	0	0	0	0	0
Subtotal Arab OPEC .....	2,909	492	0	0	0	0	3,401
<b>Other OPEC</b>							
Ecuador .....	0	0	0	373	0	0	373
Gabon .....	0	0	0	0	0	0	0
Indonesia .....	0	0	0	4	0	0	4
Iran .....	0	0	0	0	0	0	0
Nigeria .....	(s)	0	0	0	0	0	0
Venezuela .....	1,315	0	570	727	3,935	0	6,548
Subtotal Other OPEC .....	1,315	0	570	1,104	3,935	0	6,924
<b>Other</b>							
Angola .....	0	271	0	0	0	0	271
Australia .....	0	0	0	0	0	0	0
Bahamas .....	307	0	0	199	492	0	998
Bolivia .....	0	0	0	0	0	0	0
Brazil .....	0	0	338	0	0	0	338
Brunei .....	0	0	0	0	0	0	0
Canada .....	102	92	490	90	15	0	789
Congo .....	0	0	0	0	0	0	0
Egypt .....	0	0	0	0	0	0	0
France .....	0	0	0	0	0	0	0
Ghana .....	0	0	0	0	0	0	0
Liberia .....	0	0	0	0	0	0	0
Malaysia .....	0	0	0	0	0	0	0
Mexico .....	0	0	0	0	349	0	349
Netherlands .....	0	212	0	0	195	0	407
Netherlands Antilles .....	0	0	0	50	3,652	0	3,702
Norway .....	0	0	0	0	0	0	0
Oman .....	0	0	0	0	0	0	0
People's Republic of China .....	0	0	0	0	0	0	0
Peru .....	0	0	258	0	0	0	258
Puerto Rico .....	0	0	0	0	0	0	0
Romania .....	0	0	0	0	0	0	0
Spain .....	0	0	0	0	0	0	0
Syria .....	0	0	0	0	0	0	0
Trinidad .....	0	0	0	349	263	0	612
Tunisia .....	0	0	0	0	0	0	0
United Kingdom .....	0	0	243	0	0	0	243
Virgin Islands .....	0	0	700	748	999	0	2,447
Yugoslavia .....	0	0	0	0	0	0	0
Zaire .....	0	0	0	0	0	0	0
Other Western Hemisphere .....	229	0	837	347	0	0	1,414
Other Eastern Hemisphere .....	1	496	742	114	0	0	1,353
Subtotal Other .....	639	1,072	3,609	1,898	5,964	0	13,183
<b>Total Imports .....</b>	<b>4,864</b>	<b>1,564</b>	<b>4,180</b>	<b>3,002</b>	<b>9,899</b>	<b>0</b>	<b>23,508</b>

(s) Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation.

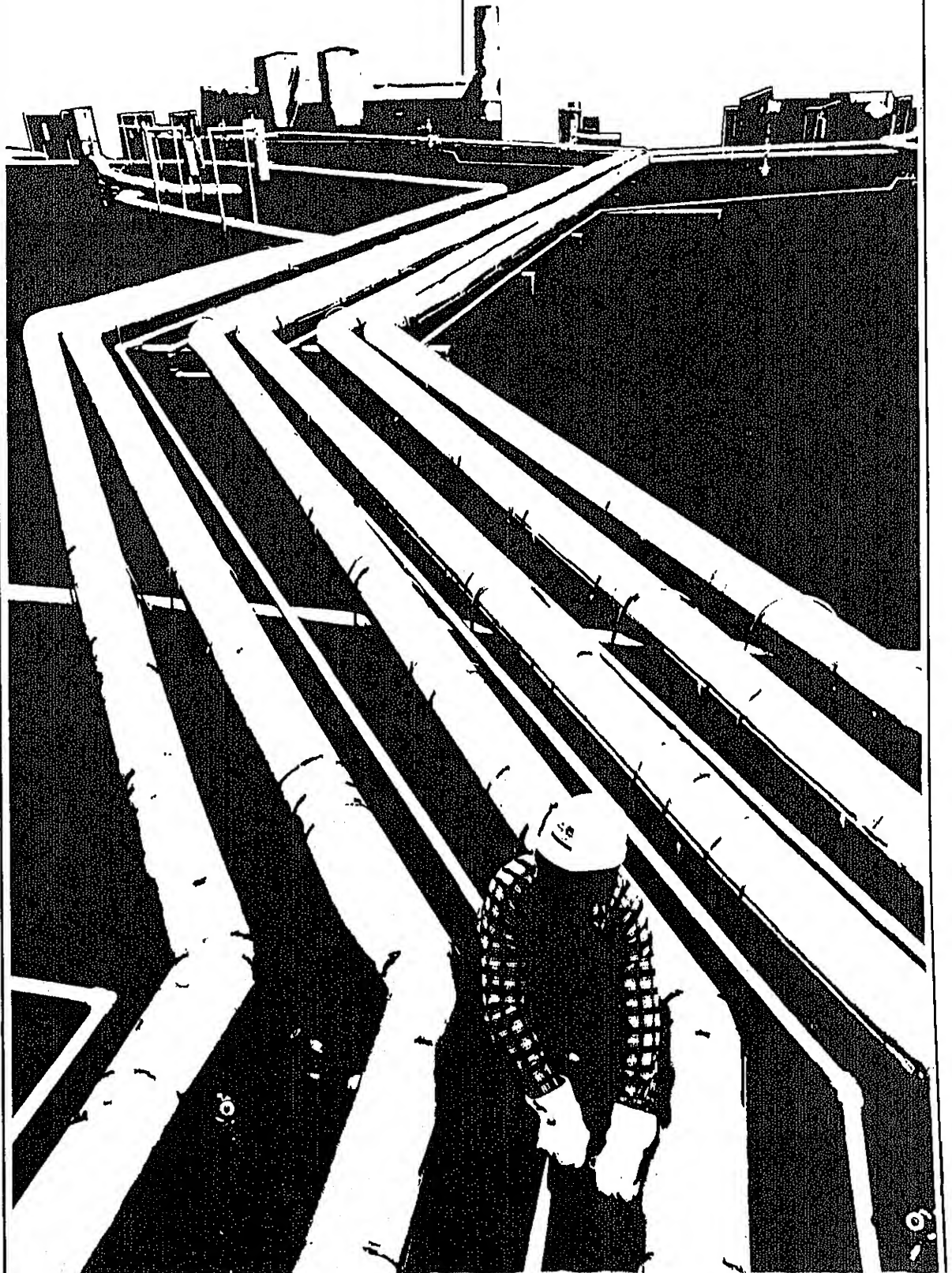
Table 32. Imports of Residual Fuel Oil by Sulfur Content by State of Entry, October 1982  
(Thousands of Barrels)

State	Residual Fuel Oil						Total
	0.00 to 0.30%	0.31 to 0.50%	0.51 to 1.00%	1.01 to 2.00%	Greater Than 2.00%	Not Specified	
PAD District I .....	4,162	807	4,025	2,479	7,535	0	19,009
Connecticut .....	262	0	0	0	108	0	370
Florida .....	0	0	0	154	1,494	0	1,648
Maine .....	0	92	180	155	756	0	1,184
Maryland .....	0	0	962	302	517	0	1,781
Massachusetts .....	0	0	0	0	1,234	0	1,234
New Jersey .....	500	127	902	567	1,322	0	3,418
New York .....	3,312	375	1,663	1,167	1,020	0	7,537
Pennsylvania .....	0	212	95	135	420	0	862
Rhode Island .....	0	0	222	0	0	0	222
South Carolina .....	6	0	0	0	100	0	106
Virginia .....	83	0	0	0	565	0	648
PAD District II .....	92	0	155	55	15	0	316
Illinois .....	92	0	124	0	0	0	216
Michigan .....	0	0	31	0	0	0	31
North Dakota .....	0	0	0	55	15	0	69
PAD District III .....	599	492	0	349	2,023	0	3,463
Louisiana .....	248	0	0	349	1,719	0	2,316
Texas .....	351	492	0	0	304	0	1,147
PAD District IV .....	0	0	0	0	0	0	0
PAD District V .....	11	265	0	118	326	0	720
California .....	0	0	0	0	326	0	326
Hawaii .....	1	265	0	118	0	0	384
Washington .....	9	0	0	0	0	0	9
All PAD Districts .....	4,864	1,564	4,180	3,902	9,899	0	23,508

Note: Total may not equal sum of components due to independent rounding.  
Sources: See Explanatory Notes on Data Collection and Estimation.



# Glossary





## Definitions of Petroleum Products and Other Terms

**Alcohol.** The family name of a group of organic chemical compounds composed of carbon, hydrogen, and oxygen. The series of molecules vary in chain length and are composed of a hydrocarbon plus a hydroxyl group,  $\text{CH}(\text{CH})_n\text{-OH}$ . "Alcohol" includes ethanol and methanol.

**Asphalt.** A dark-brown-to-black cement-like material, containing bitumens as the predominant constituents, obtained by petroleum processing. The definition includes crude asphalt as well as the following finished products: cements, fluxes, the asphalt content of emulsions (exclusive of water), and petroleum distillates blended with asphalt to make cutback asphalts. The conversion factor is 5.5 42-gallon barrels per short ton.

**ASTM.** The acronym for the American Society for Testing and Materials.

**Aviation Gasoline Blending Components.** Finished components in the gasoline range which will be used for blending or compounding into finished aviation gasoline.

**Aviation Gasoline (Finished).** All special grades of gasoline for use in aviation reciprocating engines, as given in ASTM Specification D 910 and Military Specification MIL-G-5572.

**Barrel.** A volumetric unit of measure for crude oil and petroleum products equivalent to 42 U.S. gallons. This measure is used in most statistical reports. Factors for converting petroleum coke, asphalt, and wax to barrels are given in the definitions for these products.

**Butane.** A normally gaseous paraffinic hydrocarbon,  $\text{C}_4\text{H}_{10}$ . It is extracted from natural gas or refinery gas streams. Butane is covered by ASTM Specification D1835 and Gas Processors Association Specification for commercial butane.

- **Normal Butane**—A saturated straight-chain hydrocarbon of butane. It is a colorless paraffinic gas that boils at a temperature of  $31.1^\circ\text{F}$ . This classification includes mixtures of gases that contain 80 percent or more normal butane.

- **Other Butanes**—All butanes not included as normal butane or isobutane.

**Butane-Propane Mixtures.** Mixtures consisting exclusively of butane and propane that conform to ASTM Specification D1835 and Gas Processors Association Specification for commercial butane-propane. They are extracted from natural gas and refinery gas streams.

**Butylene.** An olefinic hydrocarbon,  $\text{C}_4\text{H}_8$ , recovered from refinery processes. It is reported in the "Butane" category.

**Coal.** A generic term applied to carbonaceous rocks that were formed by the partial or complete decomposition of vegetation. These stratified carbonaceous rocks are either solid or brittle and are highly combustible. Includes lignite, bituminous coal, and anthracite which conform to ASTM Specification D 388.

**Crude Oil (including Lease Condensate).** A mixture of hydrocarbons that existed in liquid phase in underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities. Lease condensate is included. Drips are also included, but topped crude (residual) oil and other unfinished oils are excluded. Liquids produced at natural gas processing plants and mixed with crude oil are likewise excluded where identifiable. Crude oil is considered as either domestic or foreign, according to the following:

- **Domestic**—Crude oil produced in the United States or from its outer continental shelf as defined in 43 U.S.C. 1331. Hydrocarbons such as shale oil and tar sand oil are included.

- **Foreign**—Crude oil produced outside the United States. Imported Athabasca hydrocarbons are included.

**Distillate Fuel Oil.** A general classification for one of the petroleum fractions produced in conventional distillation operations. It is used primarily for space heating, on- and off-highway diesel engine fuel (including railroad engine fuel and fuel for agricultural machinery), and electric power generation. Included are products known as No. 1 and No. 2 heating oils, No. 1 and No. 2 diesel fuel oils, and No. 4 fuel oil.

- **No. 1 Fuel Oil**—A light distillate fuel oil intended for vaporizing pot-type burners. ASTM Specification D 396 specifies for this grade maximum distillation temperatures of 400° F. at the 10-percent point and 550° F. at the 90-percent point, and kinematic viscosities between 1.4 and 2.2 centistokes at 100° F.

- **No. 2 Fuel Oil**—A distillate fuel oil for domestic heating for use in atomizing-type burners or for moderate capacity commercial-industrial burner units. ASTM Specification D 396 specifies for this grade temperatures at the 90-percent point between 540° and 640° F., and kinematic viscosities between 2.0 and 3.6 centistokes at 100° F.

- **No. 1 and No. 2 Diesel Fuel Oils**—Distillate fuel oils used in compression-ignition engines, as given by ASTM Specification D 975:

1. **No. 1-D**—A volatile distillate fuel oil in the 400° to 550° F. boiling range for engines in service requiring frequent speed and load changes. Type C-B diesel fuel, which is used for city buses and similar operations, is included.

2. **No. 2-D**—A distillate fuel oil of lower volatility in the 540° to 640° F. boiling range for engines in industrial and heavy mobile service. Type R-R diesel fuel for railroad compression-ignition engines and Type T-T for diesel-engine trucks are included.

- **No. 4 Fuel Oil**—A fuel oil for commercial burner installations not equipped with preheating facilities. It is used extensively in industrial plants. This grade is a blend of distillate fuel oil and residual fuel oil stocks that conforms to ASTM Specification D 396 or Federal Specification VV-F-815C; its kinematic viscosity is between 5.8 and 26.4 centistokes at 100° F. Also included is No. 4-D, a fuel oil for low- and medium-speed diesel engines that conforms to ASTM Specification D 975.

**Eastern Hemisphere.** That half of the earth east of the Atlantic Ocean which includes Europe, Asia, Africa, and Australia. The Hawaiian Foreign Trade Zone is in this hemisphere.

**Electric Energy (Purchased).** Electricity purchased for refinery operations that is not produced within the refinery complex.

**Ethane.** A normally gaseous paraffinic hydrocarbon,  $C_2H_6$ , extracted from natural gas and refinery gas streams. "Ethane" includes any product containing 90 percent liquid volume or more ethane.

**Ethane-Propane Mixtures.** Mixtures of ethane and propane in which neither component is 90 percent or more of the liquid volume. It is extracted from natural gas and refinery gas streams.

**Ethylene.** An olefinic hydrocarbon,  $C_2H_4$ , recovered from refinery and petrochemical processes. It is reported in the "Ethane" category.

**Field Production.** Represents crude oil production on leases, natural gas liquids production at natural gas processing plants, and new supply of other hydrocarbons and alcohol.

**Gas Well Gas.** Natural gas produced from gas wells. Such gas may be either associated gas or non-associated gas.

- **Associated Gas**—Free natural gas in immediate contact, but not in solution, with crude oil in the reservoir.

- **Non-Associated Gas**—Free natural gas not in contact with, nor dissolved in, crude oil in the reservoir.

**Imported Crude Oil Burned as Fuel.** The amount of foreign crude oil burned as a fuel oil, usually as residual fuel oil, without being processed as such. "Imported crude oil burned as fuel" includes lease condensate and liquid hydrocarbons produced from tar sand oil, gilsonite, and oil shale.

**Isobutane.** A saturated branch-chain isomer of butane. It is a colorless paraffinic gas that boils at a temperature of 10.9° F. This classification includes mixtures of gases that contain 80 percent liquid volume or more isobutane. It is extracted from natural gas and refinery gas streams.

**Isopentane.** A saturated branch-chain hydrocarbon, C<sub>5</sub>H<sub>12</sub>, obtained by fractionation of natural gasoline or isomerization of normal pentane.

**Kerosene.** A petroleum distillate that boils at a temperature between 300° and 550° F., that has a flash point higher than 100° F. by ASTM Method D 56, that has a gravity range from 40° to 46° API, and that has a burning point in the range of 150° to 175° F. It is a clean-burning product suitable for use as an illuminant when burned in wick lamps. Includes grades of kerosene called range oil having properties similar to No. 1 fuel oil, but with a gravity of about 48° API and having a maximum end-point of 625° F. Kerosene is used in space heaters, cook stoves, and water heaters.

**Kerosene-Type Jet Fuel.** A quality kerosene product with an average gravity of 40.7° API, a 10-percent distillation temperature of 400° F., and an end-point of 572° F. It is covered by ASTM Specification D 1655 and Military Specification MIL-T-5624L (Grade JP-5 and JP-8). It is used primarily for commercial turbojet and turboprop aircraft engines.

**Lease Condensate.** A natural gas liquid recovered from gas well gas (associated and non-associated) in lease separators or natural gas field facilities. Lease condensate consists primarily of pentanes and heavier hydrocarbons.

**Lease Separator.** A surface facility used for separating casinghead gas from produced crude oil and water and separating gas from that portion of associated gas and non-associated gas that liquefies at the temperature and pressure conditions of the separator.

**Liquefied Petroleum Gases (LPG).** Propane, propylene, butanes, butylene, ethane-propane mixtures, and isobutane produced at refineries or natural gas processing plants, including plants that fractionate raw natural gas plant liquids. Formerly called "Liquefied Gases."

**Liquefied Refinery Gases (LRG).** Liquefied petroleum gases fractionated from refinery or still gases. Through compression and/or refrigeration they are retained in the liquid state. The reported categories are ethane and/or ethylene, propane and/or propylene, butane and/or butylene, butane-propane mixtures, and isobutane. Excludes still gases used for chemical or rubber manufacture which are reported as petrochemical feedstocks and also excludes liquefied gases ready for blending into gasoline which are reported as gasoline blending components. Liquefied refinery gases are reported for use as petrochemical feedstocks, other uses, or both.

**Lubricants.** A substance used to reduce friction between bearing surfaces. Petroleum lubricants may be produced either from distillates or residues. Other substances may be added to impart or improve certain required properties. "Lubricants" includes all grades of lubricating oils from spindle oil to cylinder oil and those used in greases. The three categories reported are:

- **Bright Stock**—A refined, high viscosity lubricating oil base stock that is usually made from a residuum by a treatment such as deasphalting, acid treatment, or solvent extraction.
- **Neutral**—A distillate lubricating oil base stock with a viscosity that is usually not above 550 Saybolt Universal Seconds (SUS) at 100° F. It is prepared by a treatment such as hydrofining, acid treatment, or solvent extraction.
- **Other**—A lubricating oil base stock used in finished lubricating oils and greases, including black, coastal, and red oils.

**Miscellaneous Products.** Includes all finished products not classified elsewhere. "Miscellaneous products" include petrolatum, absorption oils, ram-jet fuel, petroleum rocket fuels, synthetic natural gas feedstocks, and other finished products.

**Motor Gasoline Blending Components.** Finished components in the gasoline range that will be used for blending or compounding into finished motor gasoline. Pool gasoline is included in this category.

**Motor Gasoline (Finished).** A complex mixture of relatively volatile hydrocarbons, with or without small quantities of additives, that have been blended to form a fuel suitable for use in spark-ignition

engines. Specifications for motor gasoline, as given in ASTM Specification D 439 or Federal Specification VV-G-1690B, include a boiling range of 122° to 158° F. at the 10-percent point to 365° to 374° F. at the 90-percent point and a Reid vapor pressure range from 9 to 15 psi. "Motor gasoline" includes finished leaded gasoline, finished unleaded gasoline, and gasohol. Blendstock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

- **Finished Leaded Gasoline**—Contains more than 0.05 grams of lead per gallon or more than 0.005 grams of phosphorus per gallon. The actual lead content of any given gallon, however, may vary as a function of the size of the producer and company according to specific Environmental Protection Agency waiver provisions. Premium and regular grades are included, depending on the octane rating.
- **Finished Unleaded Gasoline**—Contains up to 0.05 grams of lead per gallon and 0.005 grams of phosphorus per gallon. Premium and regular grades are included, depending on the octane rating.
- **Gasohol**—A blend of alcohol and finished motor gasoline that is no more than 90 percent of finished motor gasoline (leaded or unleaded as described above) and no less than 10 percent or more alcohol (ethanol or methanol).

**Motor Gasoline (Total).** Includes finished leaded motor gasoline, finished unleaded motor gasoline, motor gasoline blending components, and gasohol.

**Naphtha-Type Jet Fuel.** A fuel in the heavy naphtha boiling range with an average gravity of 52.8° API and 20 to 90 percent distillation temperatures of 290° to 470° F., meeting Military Specification MIL-T-5624L (Grade JP-4). JP-4 is used for turbojet and turboprop aircraft engines, primarily by the military. This category excludes ram-jet and petroleum rocket fuels, which are included in the "Miscellaneous Products" category.

**Natural Gas.** A mixture of hydrocarbons and small quantities of various nonhydrocarbons existing in the gaseous phase or in solution with crude oil in underground reservoirs.

**Natural Gas Field Facility.** A field facility designed to process natural gas produced from more than one lease for the purpose of recovering condensate from a stream of natural gas; however, some field facilities are designed to recover propane, butane, natural gasoline, etc., and to control the quality of natural gas to be marketed.

**Natural Gas Plant Liquids.** Natural gas liquids recovered from natural gas in gas processing plants, and in some situations, from natural gas field facilities. Natural gas liquids extracted by fractionators are also included. These liquids are defined according to the published specifications of the Gas Processors Association and the American Society for Testing and Materials, and are classified as follows: Ethane, propane, ethane-propane mix, isobutane, butane, butane-propane mix, isopentane, natural gasoline, plant condensate, unfractionated stream, and other products from natural gas processing plants (i.e., products meeting the standards of finished petroleum products produced at natural gas processing plants, such as finished motor gasoline, finished aviation gasoline, special naphthas, kerosene, distillate fuel oil, and miscellaneous products).

**Natural Gas Processing Plant.** A facility designed to recover natural gas liquids from a stream of natural gas that may or may not have been processed through lease separators or natural gas field facilities. The facility also controls the quality of natural gas to be marketed. Cycling plants are classified as gas processing plants.

**Natural Gasoline.** A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas, that meets vapor pressure, end-point, and other specifications for natural gasoline set by the Gas Producers Association.

**OPEC.** The acronym for the Organization of Petroleum Exporting Countries, oil-producing and-exporting countries that have organized for the purpose of negotiating with oil companies on matters of oil production, prices, and future concession rights. Current members are Algeria,, Ecuador, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela.

**Operable Distillation Capacity.** The maximum amount of input that can be processed by a crude oil distillation unit in a 24-hour period, making allowances for processing limitations due to types and

grades of inputs, limitations of downstream facilities, scheduled and unscheduled downtimes, and environmental constraints. Includes any shutdown capacity that could be placed in operation within 90 days.

**Other Hydrocarbons.** Materials received by a refinery and consumed as raw materials. Includes hydrogen, coal, tar derivatives, gilsonite, and natural gas received by the refinery for reforming into hydrogen. Natural gas to be used as fuel is excluded.

**Petrochemical Feedstocks.** Chemical feedstocks derived from petroleum, principally for the manufacture of synthetic rubber and a variety of plastics. The categories reported are "Naphtha-less than 400° F. end-point" and "Other oils over 400° F. end-point."

- **Naphtha less than 400° F. end-point**—A naphtha with an end point of less than 400° F. and that is reported as used as a petrochemical feedstock.
- **Other oils over 400° F. end-point**—Oils with an end point over 400° F. and that are reported as used as a petrochemical feedstock.

**Petroleum Coke.** A residue, the final product of the condensation process in cracking. This product is reported as marketable coke or catalyst coke. The conversion factor is 5 42-gallon barrels per short ton.

- **Marketable Coke**—Those grades of coke that are produced in delayed or fluid cokers and which may be recovered as relatively pure carbon. This "green" coke may be sold or further purified by calcining.
- **Catalyst Coke**—In many catalytic operations (i.e., catalytic cracking) carbon is deposited on the catalyst, thus deactivating the catalyst. The catalyst is reactivated by burning off the carbon, which is used as fuel in the refinery process. This carbon or coke is not recoverable in a concentrated form.

**Petroleum Products.** Petroleum products are obtained from the processing of crude oil (including lease condensate), natural gas, and other hydrocarbon compounds. Petroleum products include unfinished oils, natural gasoline and isopentane, plant condensate, unfractionated stream, ethane, liquefied petroleum gases, aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, naphtha less than 400° F. end-point, other oils-over 400° F. end-point, special naphthas, lubricants, waxes, petroleum coke, asphalt, road oil, still gas, and miscellaneous products.

**Petroleum Refinery.** An installation that manufactures finished petroleum products from crude oil, unfinished oils, natural gas plant liquids, other hydrocarbons, and alcohol.

**Plant Condensate.** One of the natural gas plant liquids, mostly pentanes and heavier hydrocarbons, recovered and separated as liquids at gas inlet separators or scrubbers in processing plants.

**Primary Stocks.** Stocks of crude oil or petroleum products held in storage at (or in) leases, refineries, natural gas processing plants, pipelines, tankfarms, and bulk terminals that can store at least 50,000 barrels of petroleum products or that can receive petroleum products by tanker, barge, or pipeline. Crude oil that is in transit from Alaska, or that is stored on Federal leases or in the Strategic Petroleum Reserve is included. "Primary Stocks" excludes stocks of foreign origin that are held in bonded warehouse storage.

**Propane.** A normally gaseous hydrocarbon,  $C_3H_8$ , extracted from natural gas and refinery gas streams. It is used primarily as a fuel and as a petrochemical feedstock. Propane is covered by ASTM Specification D1835, Gas Processors Association for commercial and HD-5 propane, and ASTM Specification for special duty propane.

**Propylene.** An olefinic hydrocarbon,  $C_3H_6$ , recovered from refinery and petrochemical processes. It is reported in the "Propane" category.

**Residual Fuel Oil.** Topped crude of refinery operations. "Residual Fuel Oil" includes No. 5 and No. 6 fuel oils as defined in ASTM Specification D 396 and Federal Specification VV-F-815C; Navy Special fuel oil as defined in Military Specification MIL-F-859E including Amendment 2; Bunker C fuel oil. Residual fuel oil is used for the production of electric power, space heating, vessel bunkering, and various industrial purposes. Imports of residual fuel oil include "Imported Crude Oil Burned as Fuel."

**Road Oil.** Any heavy petroleum oil, including residual asphaltic oils, used as a dust palliative and surface treatment of roads and highways. It is generally produced in six grades; from 0, the most liquid, to 5, the most viscous.

**Special Naphthas.** All finished products within the gasoline range that are used as paint thinners, cleaners, and solvents. These products are refined to a specified flash point and have a boiling range of 90° to 220° F. "Special naphthas" includes all commercial hexane and cleaning solvents conforming to ASTM Specifications D1836 and D 484, respectively. Naphthas to be blended or marketed as motor gasoline or aviation gasoline or that are to be used as petrochemical and synthetic natural gas (SNG) feedstocks are excluded.

**Steam (Purchased).** Steam that is purchased for use by a refinery that was not generated from within the refinery complex.

**Still Gas (Refinery Gas).** Any form or mixture of gas produced in refineries by distillation, cracking, reforming, and other processes. The principal constituents are methane, ethane, ethylene, butane, butylene, propane, propylene, etc. Still gas is reported for petrochemical feedstock use and refinery fuel use.

- **Petrochemical Feedstock Use**—Includes all refinery streams which are used by chemical or rubber manufacturing operations for further processing, less the amount of such streams returned to the source refinery. Finished petrochemical products are not included. For example, polyethylene, butadiene, etc. are considered petrochemical products; therefore, only their feedstock equivalents are included.

- **Fuel Use**—All other still gas.

**Strategic Petroleum Reserve (SPR).** Stocks (currently, only crude oil) maintained by the Federal Government for use during periods of major supply interruption.

**Unfinished Oils.** Includes all oils requiring further processing, except those requiring only mechanical blending.

**Unfractionated Stream.** Mixtures of unsegregated natural gas plant liquid components excluding those included in plant condensate. This product is extracted from natural gas.

**Wax.** A solid or semi-solid material derived from petroleum distillates or residues by such treatments as chilling, precipitating with a solvent, or de-oiling. It is a light-colored, more-or-less translucent crystalline mass, slightly greasy to the touch, consisting of a mixture of solid hydrocarbons in which the paraffin series predominates. Includes all marketable wax whether crude scale or fully refined. The three grades reported are microcrystalline, crystalline—fully refined, and crystalline—other. The conversion factor is 280 pounds per 42-gallon barrel.

- **Microcrystalline Wax**—Wax extracted from certain petroleum residues having a finer and less apparent crystalline structure than paraffin wax and having the following physical characteristics:

Penetration at 77° F. (D-1321)—60 maximum.  
Viscosity at 210° F. in Saybolt Universal Seconds (SUS)  
(D-88)—60 SUS (10.22 centistokes) minimum to 150  
SUS (31.8 centistokes) maximum.  
Oil content (D-721)—5 percent minimum.

- **Crystalline-Fully Refined Wax**—A light-colored paraffin wax having the following characteristics:

Viscosity at 210° F.  
(D-88)—59.9 SUS (10.18 centistokes) maximum.  
Oil Content (D-721)—0.5 percent maximum.  
Other +20 color, Saybolt minimum.

- **Crystalline-Other Wax**—A paraffin wax having the following characteristics:

Viscosity at 210° F. (D-88)—59.9 SUS (10.18 centistokes) maximum.  
Oil Content (D-721)—0.51 percent minimum to 15 percent maximum.

**Western Hemisphere.** That half of the earth that includes North and South America and the surrounding waters.

# Bureau of Mines Petroleum Refining Districts and PAD Districts

## PAD District

## Refining District

I

**East Coast**—District of Columbia and the States of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New Jersey, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, Florida, and the following counties of the State of New York: Cayuga, Tompkins, Chemung and all counties east and north thereof. Also the following counties in the State of Pennsylvania: Bradford, Sullivan, Columbia, Montour, Northumberland, Dauphin, York, and all counties east thereof.

**Appalachian #1**—The State of West Virginia, those parts of the States of Pennsylvania and New York not included in the East Coast District.

**Appalachian #2**—The following counties of the State of Ohio: Erie, Huron, Crawford, Marion, Delaware, Franklin, Pickaway, Ross, Pike, Scioto, and all counties east thereof.

II

**Indiana—Illinois—Kentucky**—The States of Indiana, Illinois, Kentucky, Tennessee, Michigan, and that part of the State of Ohio not included in the Appalachian District.

**Minnesota—Wisconsin—North and South Dakota**—The States of Minnesota, Wisconsin, North Dakota, and South Dakota.

**Oklahoma—Kansas—Missouri**—The States of Oklahoma, Kansas, Missouri, Nebraska, and Iowa.

**Texas Inland**—The State of Texas except the Texas Gulf Coast District.

**Texas Gulf Coast**—The following counties of the State of Texas: Newton, Orange, Jefferson, Jasper, Tyler, Hardin, Liberty, Chambers, Polk, San Jacinto, Montgomery, Harris, Galveston, Waller, Fort Bend, Brazoria, Wharton, Matagorda, Jackson, Victoria, Calhoun, Refugio, Aransas, San Patricio, Nueces, Kleberg, Kenedy, Willacy, and Cameron.

III

**Louisiana Gulf Coast**—The following Parishes of the State of Louisiana: Vernon, Rapides, Avoyelles, Pointe Coupee, West Feliciana, East Feliciana, Saint Helena, Tangipahoa, Washington, and all Parishes south thereof. Also the following counties of the State of Mississippi: Pearl River, Stone, George, Hancock, Harrison, and Jackson. Also the following counties of the State of Alabama: Mobile and Baldwin.

**North Louisiana—Arkansas**—The State of Arkansas and those parts of the States of Louisiana, Mississippi, and Alabama not included in the Louisiana Gulf Coast District.

**New Mexico**—The State of New Mexico.

IV

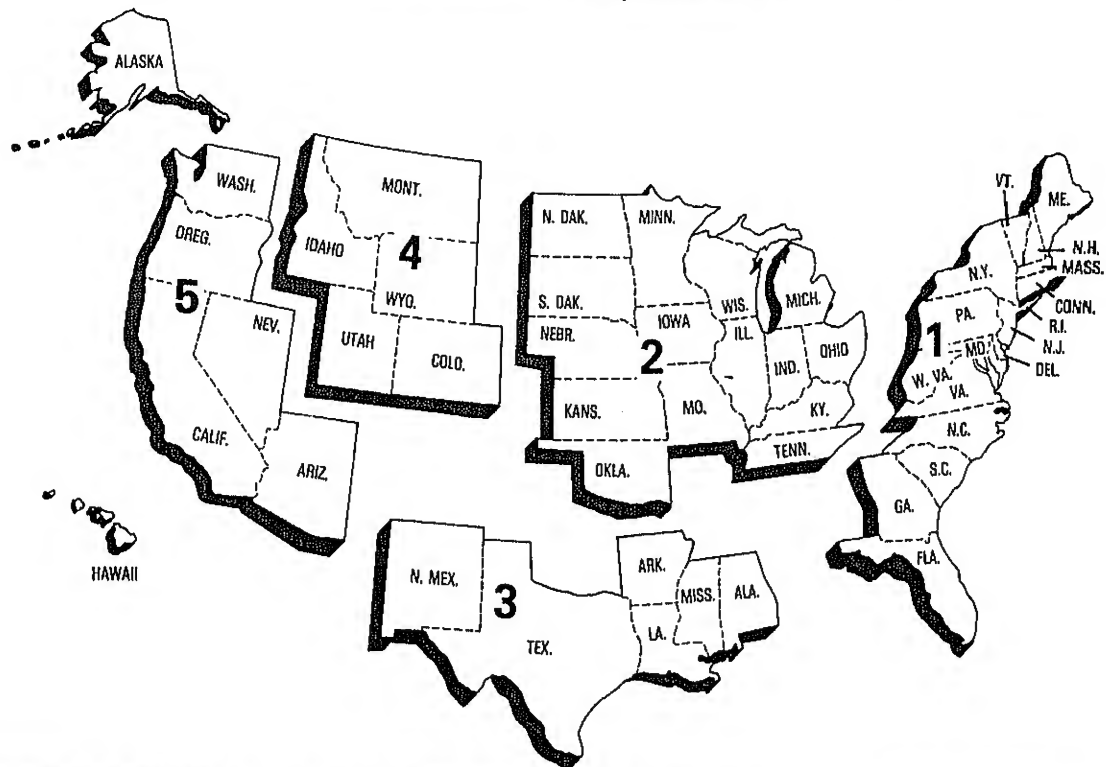
**Rocky Mountain**—The States of Montana, Idaho, Wyoming, Utah, and Colorado.

V

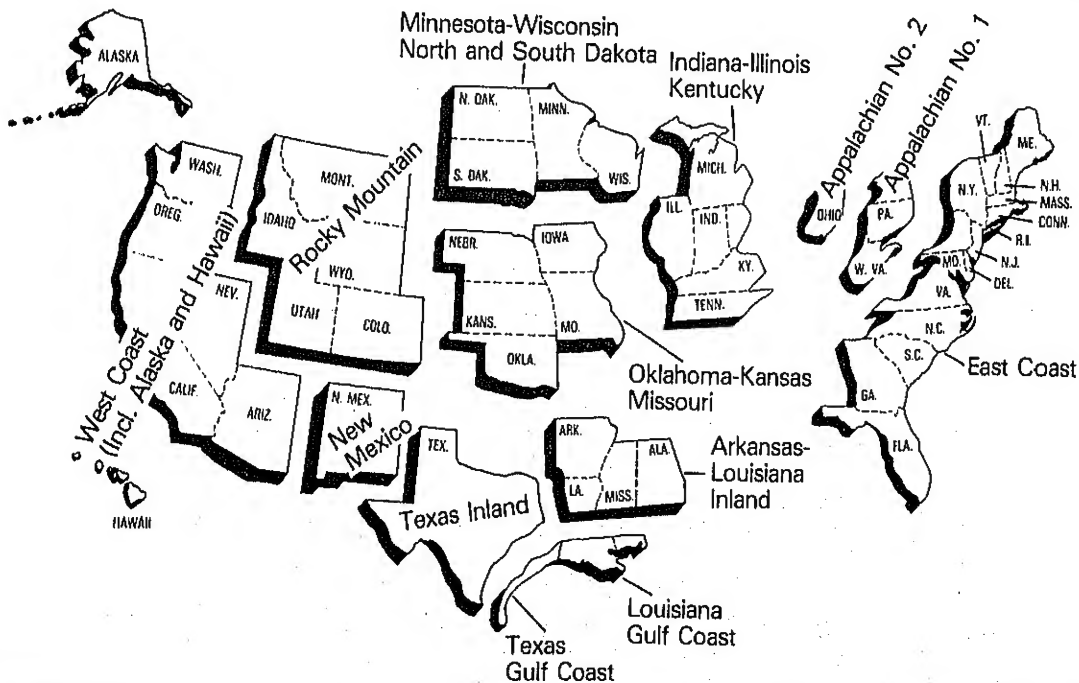
**West Coast**—The States of Washington, Oregon, California, Nevada, Arizona, Alaska, and Hawaii.



## Petroleum Administration for Defense (PAD) Districts

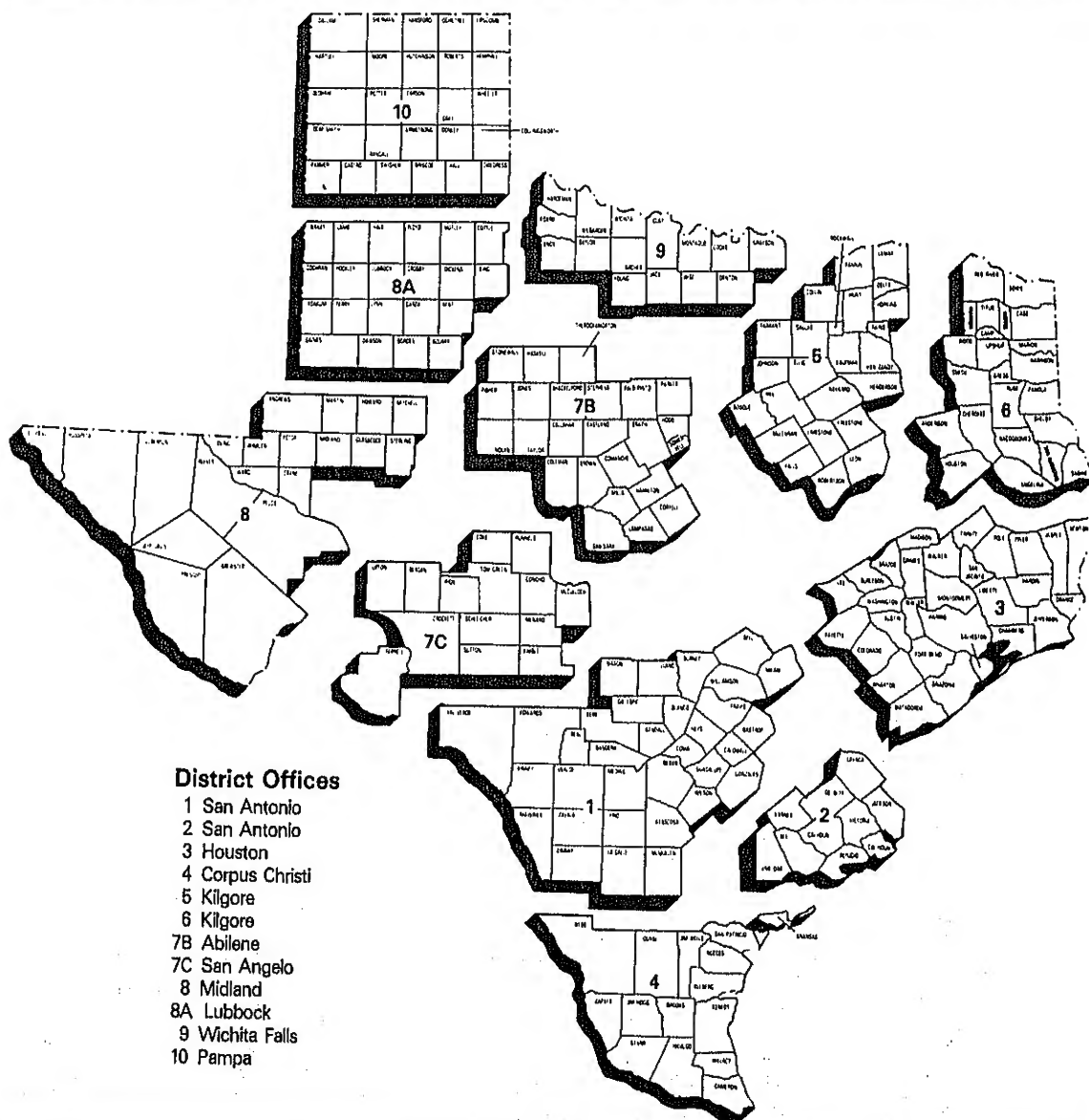


## Bureau of Mines Refining Districts

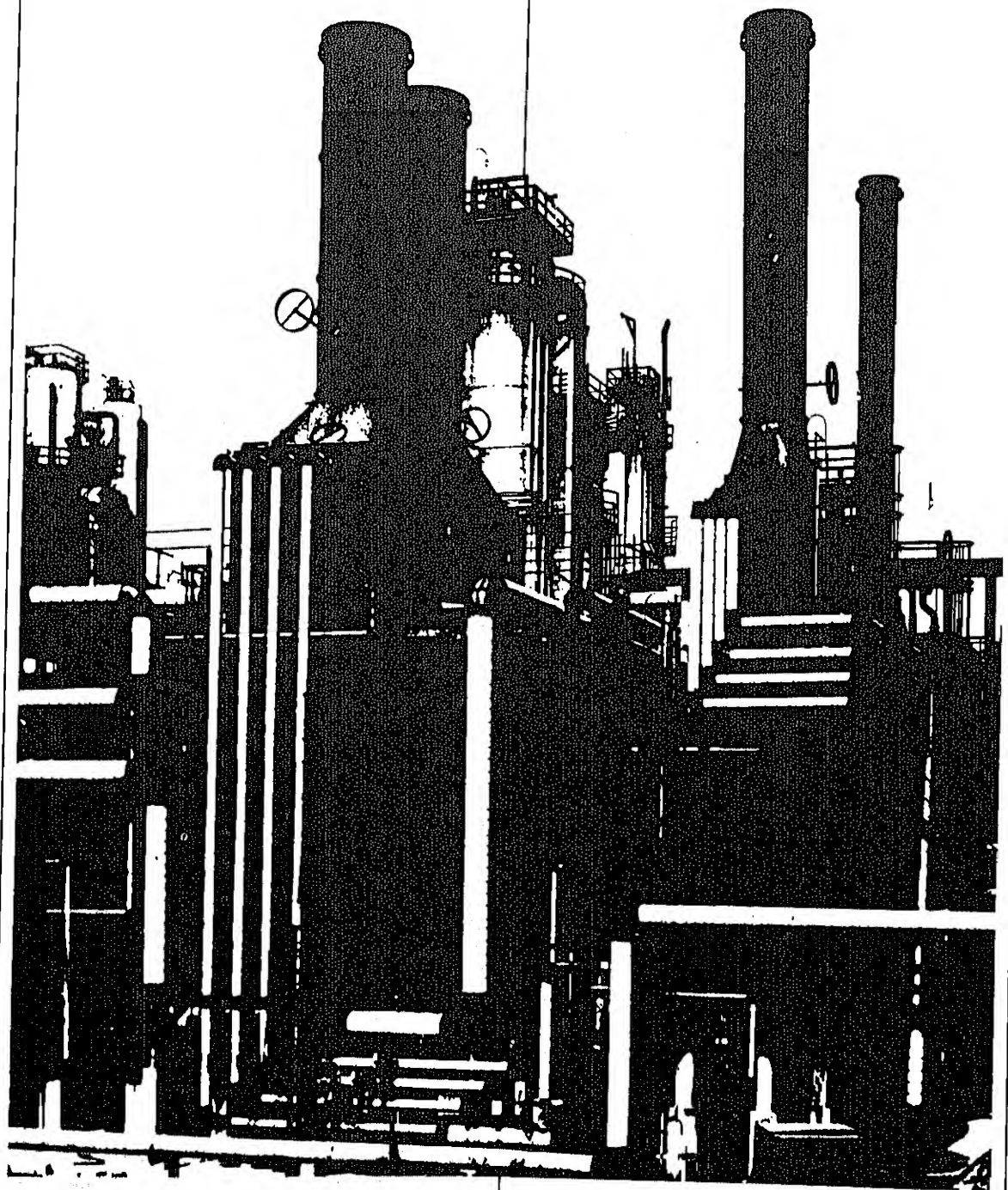




## District Map Oil and Gas Division Railroad Commission of Texas



# Explanatory Notes



# Explanatory Notes

## Note 1.1 EIA-64: Natural Gas Liquids Operations Report

### Background

The EIA-64, "Natural Gas Liquids Operations Report" evolved from a survey designed and conducted by the United States Geological Survey beginning in 1911. This form collects data on the production and storage of natural gas plant liquids at natural gas processing plants and fractionators.

### Description of Survey

#### Universe

The universe includes all operators of facilities designed to: (1) extract liquid hydrocarbons from natural gas streams (natural gas processing plants); (2) separate a combined products liquid hydrocarbon stream into its component products, i.e. propane, butane, natural gasoline, etc. (fractionators); or (3) store the liquid hydrocarbon output of plants and fractionators.

The mailing list is automated. It is maintained by matching periodically with the *LP Gas Almanac* listings (including supplements) and the *Oil and Gas Journal* Processing Plant Survey listings, and by making changes reported by the respondents.

#### Information Collected

The data are submitted monthly by facility and include all products that the company controls through possession, regardless of ownership. The main items of information collected by the EIA-64 are shown by the example of the form presented below.

#### Collection Methods

Completed reports are required to be postmarked 20 days following the last day of the report month. Follow-up telephone calls are made to nonrespondents in order to collect data before publication of the aggregated data.

#### Imputing Missing Data

Imputation is performed only for companies that submitted a report in the previous month. For such companies, previous monthly values are used for current values. The previous month's ending stocks value is used for both the current month's beginning stocks and the current month's ending stocks. The value of shipments is adjusted to balance stock level, production, receipts, plant fuel use, and losses. In the event that the previous month's data were estimated, the respondent is contacted and requested to submit estimates, if necessary, to be followed by a resubmission of actual data.

#### Response Rates

The initial response rate averages 85 percent, with a final response averaging 98 percent as a result of telephone follow-up procedures.

#### Data Processing

Upon receipt, the reports are reviewed for identification section omissions, duplicate submissions, and identification information changes. The data are then entered and edited. The edit program includes checks for invalid data entry codes, range checks for current-month to previous-month changes (absolute and relative), arithmetic calculation errors, line balancing errors, etc. Telephone calls are made to respondents to resolve questions.

## Note 1.2 EIA-87, 88, 89 and 90: Joint Petroleum Reporting System

### Background

The Joint Petroleum Reporting System (JPRS) comprises four surveys: the "Refinery Report" (EIA-87); the "Bulk Terminal Stocks Report" (EIA-88); the "Pipeline Products Report" (EIA-89); and the

## Natural Gas Liquids Operations Report

This Report is Mandatory Under Public Law 93-275 Failure to Comply may Result in Criminal Fines, Civil Penalties and Other Sanctions as Provided by Law

Report Type

Report Date (Last Day of Reporting Month)

Farm Approved  
OMB No.1905-0109

For DOE Use Only

Plant Name

## Section 1. Natural Gas Processing Plant and Fractionator Operations (Barrels of 42 Gallons)

[illegible]

"Crude Oil Stocks Report" (EIA-90). This group of forms collects data on petroleum refinery operations and on storage of crude oil and petroleum products. The origins of JPRS lie in the voluntary petroleum reporting systems instituted by the Bureau of Mines (BOM) soon after it was established as a part of the Department of the Interior in May 1910.

## Description of Survey

### Universe

The respondent universe of each JPRS survey is defined as follows:

**EIA-87:** All petroleum refineries and plants producing finished motor gasoline through the mechanical blending of liquids which are operated or controlled in the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, Hawaiian Foreign Trade Zone, and Guam.

**EIA-88:** All bulk terminal facilities in the 50 States and the District of Columbia, Puerto Rico, and the Virgin Islands that (a) have total bulk storage capacity of 50,000 barrels or more and/or (b) receive petroleum products by tanker, barge, or pipeline regardless of ownership of the material.

**EIA-89:** All products pipeline companies that carry petroleum products (including interstate, intrastate and intracompany pipelines) in the 50 States and the District of Columbia.

**EIA-90:** Crude oil pipeline companies (gathering and trunk pipeline companies), crude oil producers, terminal operators, storers of crude oil, and companies transporting Alaskan crude oil by water (in excess of 1,000 barrels), regardless of ownership in the 50 States and the District of Columbia.

The list of respondents is kept current by checking for new respondents in the *Oil and Gas Journal* weekly magazine; newspaper articles; the Office of Resource Applications publication "Trends in Refinery Capacity & Utilization;" the Office of Refinery Operations (ERA) list of U.S. Refiners; and the annual survey EIA-177 "Capacity of Petroleum Refineries."

### Information Collected

The main items of information collected by EIA-87, are shown by the example presented below. The EIA-88 and EIA-89 collect data on petroleum product stocks. The EIA-90 collects data on crude oil stocks and crude oil used directly as fuel.

### Collection Methods

The data for the JPRS surveys are collected on a monthly basis. Completed forms are required to be postmarked by the 20th day following the report month. Telephone follow-up calls are made to nonrespondents in order to collect data before publication deadline. An automated mailing list is maintained and is used to monitor receipt of the forms.

### Imputing Missing Data

Imputation is performed only for companies that submitted a report in the previous month. For these companies, the previous monthly values are used for current values. The previous month's ending stocks value is used for both the current month's beginning stocks and the current month's ending stocks. The value of shipments is adjusted to balance stock level, production receipts, and losses. In the event that previous month's data were estimated, the respondent is contacted and requested to submit estimates if necessary, to be followed by a resubmission of actual data.

### Response Rates

As of the filing deadline, the response rate of the JPRS respondents is over 90 percent. All companies that have not responded are contacted by telephone. Although data are taken by telephone to expedite processing, a certified submission is still required. Thirty calendar days after the report month, data for companies that still fail to file the form are estimated based on prior month's data. Names of companies that fail to file for two consecutive months are forwarded to DOE for further noncompliance action. Final response rate is 100 percent.

Report Type: **B 0 1** EIA Company Identification No.: Report Period:  Yr.  Mo. 

SECTION 6. REFINERY STOCKS, RECEIPTS, INPUTS, PRODUCTION, SHIPMENTS AND REFINERY FUEL USE AND LOSSES (Thousands of Barrels of 42 Gallons)								
ITEM DESCRIPTION	PRO- DUCT CODE	STOCKS BEGINNING OF MONTH A	RECEIPTS DURING MONTH B	INPUTS DURING MONTH C	PRODUCTION DURING MONTH D	SHIPMENTS DURING MONTH E	REFINERY FUEL USE AND LOSSES DURING MONTH F	STOCKS END OF MONTH G
Crude oil (incl. lease condensate) Total (sum of codes 010 and 020)	050				X			
Domestic (incl. Alaskan)	010	X		X	X			
Foreign	020	X		X	X	X	X	X
Alaskan	011	X		X	X	X	X	X
Products of natural gas proc. plants								
Ethane	110				X			
Propane	231				X			
Ethane-propane mixtures	241				X			
Isobutane	233				X			
Normal butane	235				X			
Other butanes	236				X			
Butane-propane mixtures	234				X			
Natural gasoline and isopentane	220				X			
Plant condensate	210				X			
Unfractionated stream	227				X			
Other hydrocarbons and hydrogen	090				X			
Alcohol	091				X			
Unfinished oils	812							
Gasoline								
Finished leaded, motor	132							
Finished unleaded, motor	133							
Blending components, motor	134							
Gasohol	135							
Finished aviation	111							
Blending components, aviation	112							
Special naphthas (solvents)	061							
Jet fuel								
Naphtha-type	211							
Kerosene-type	213							
Kerosene (incl. range oil)	311							
Distillate fuel oil, Less No. 4	412							
No. 4 fuel oil	414							
Residual fuel oil	511							
Lubricating oils								
Bright stock	853							
Neutral	855							
Other	859							
Asphalt	900							
Wax								
Microcrystalline	061							
Crystalline-fully refined	071							
Crystalline-other	081							
Petroleum coke:								
Marketable	021							
Catalyst	022							
Road oil	031							
Still gas:								
Petrochemical feedstock use	042							
Other use	044							
Ethane and/or ethylene:								
Petrochemical feedstock use	612							
Other use	652							
Propane and/or propylene:								
Petrochemical feedstock use	613							
Other use	653							
Butane and/or butylene:								
Petrochemical feedstock use	614							
Other use	654							
Butane-propane mixtures:								
Petrochemical feedstock use	616							
Other use	656							
Isobutane petrochemical feedstock use	615							
Naphtha--less than 400° end-point Petrochemical feedstock use	622							
Other oils--over 400° end-point Petrochemical feedstock use	624							
Other finished products Non-fuel use	097							
Fuel Use	098							
Overage (Inputs) or shortage (production)	911	X	X			X	X	X
TOTAL	999	X	X			X	X	X

## Note 1.3 EIA-161, 162, 163, 164 and 165: Weekly Petroleum Reporting System

### Background

The Weekly Petroleum Reporting System (WPRS) comprises five surveys: the "Refinery Report" (EIA-161); the "Bulk Terminal Stocks Report" (EIA-162); the "Pipeline Product Stock Report" (EIA-163); the "Crude Oil Stocks Report" (EIA-164); and the "Imports Report" (EIA-165).

The EIA weekly reporting system was designed to collect data similar to those collected under the monthly Joint Petroleum Reporting System (JPRS) (See Note 1.2). In the WPRS, selected petroleum companies report weekly data to EIA on crude oil and petroleum product stocks, refinery inputs and production, and crude oil and petroleum product imports. On the Forms EIA-161 through EIA-164, companies report data on a custody basis. On the Form EIA-165, the importer of record reports each shipment entering the United States. Current weekly data and the most recent monthly data from the JPRS are used to estimate the published weekly totals.

### Description of Survey

#### Universe

The sample of companies that report weekly in the WPRS was selected from the universe of companies that report monthly in either the JPRS system or the ERA-60 system (for imports). All sampled companies report data only for facilities in the 50 States and the District of Columbia.

The sampling frame for each weekly survey is defined as follows:

**EIA-161:** Uses the EIA-87 universe, which includes all petroleum refineries in the United States and its territories, industrial facilities that have crude oil distillation capacity and produce some refined petroleum products, and bulk terminals that blend motor gasoline.

**EIA-162:** Uses the EIA-88 universe, which includes all bulk terminal facilities in the United States and its territories that have total bulk storage capacity of 50,000 barrels or more, or that receive petroleum products by tanker, barge, or pipeline.

**EIA-163:** Based on the EIA-89 universe, which includes all petroleum product pipeline companies in the United States and its territories that transport refined petroleum products, including interstate, intrastate and intracompany pipeline movements. Pipeline companies that only transport natural gas liquids are not included in the EIA-163 frame. Only those pipeline companies which transport products covered in the weekly survey are included.

**EIA-164:** Uses the EIA-90 universe, which consists of all trunk pipeline companies in the United States and its territories which transport crude oil, all refining companies, all crude oil producers, all terminal operators, and all storers of 1,000 barrels or more of crude oil.

**EIA-165:** Uses the ERA-60 universe, which includes all importers of record of crude oil and petroleum products into the United States and Puerto Rico.

#### Sampling

The sampling procedure used for the weekly system is the cut-off method. In the cut-off method, companies are ranked from largest to smallest on the basis of the quantities reported during some previous period. Companies are chosen for the sample beginning with the largest and adding companies until the total sample covers about 90 percent of the total for the previous time period.

#### Collection Methods

Data are collected by mail, mailgram, telephone, Telex, and Telefax on a weekly basis. All canvassed firms and terminal operating companies must file by 5:00 p.m. on the Monday following the close of the report period, 7 a.m. Friday. During the processing week, company corrections of the prior week's data are also entered.

## Formula and Calculations

After the company reports have been checked and entered into the weekly data base, ratio estimates of the weekly totals are calculated from the reported data.

First, the current week's data for a given product reported by companies in that region are summed. (Call this weekly sum,  $W_s$ .) Next, the most recent month's data for the product reported by those same companies are summed. (Call this monthly sum,  $M_s$ .) Finally, let  $M_t$  be the sum of the most recent month's data for the product as reported by *all* companies. Then, the current week's ratio estimate for that product for all companies is given by,

$$W_t = \frac{M_t}{M_s} \circ W_s$$

This procedure is used directly to estimate total weekly inputs to refineries and production.

To estimate stocks of finished products, the preceding procedure is followed separately for refineries, bulk terminals, and pipelines. Total estimates are formed by summing over establishment types.

Weekly imports data are highly variable on a company-by-company basis or a week-by-week basis. Under such conditions, the ratio method is known to result in large errors. Hence, a number of other procedures for estimating weekly imports were considered. The average ratio method was selected for estimating imports because it produces estimates that were close to benchmark values computed from monthly data. Estimates are obtained using the ratio method, but with each company in turn omitted from the sample. These estimates are then averaged to obtain the average ratio estimate.

## Imputing Missing Data

The ratio method of estimation automatically imputes for nonresponse. Data from companies that do not respond are excluded from both the weekly and the monthly totals for the sampled companies.

## Response Rates

The response rate as of the day after the filing deadline is about 80 percent for the EIA-161; 75 percent for the EIA-162; 95 percent for the EIA-163; 80 percent for the EIA-164; and greater than 95 percent for the EIA-165. However, more forms are received the next day, bringing the final response rates up. Late respondents are contacted by telephone. Nearly all of the major companies report on time. The nonresponse rate for the published estimates is usually between 2 percent and 5 percent.

# Note 1.4 EIA-170: Tanker and Barge Shipments of Crude Oil and Petroleum Products Between Districts

## Background

The EIA-170 survey collects data for calculation of monthly petroleum supply and disposition figures on U.S. and PAD District levels.

## Instrument and Design

This form is designed to collect data on total movements by tanker and barge of crude oil and petroleum products between PAD Districts or between PAD Districts and the Panama Canal, by shipping State and receiving State.

## Universe

The respondent universe of the EIA-170 consists of all known companies and plants that have custody of crude oil and petroleum products transported by tanker and barge between PAD Districts or between PAD Districts and the Panama Canal. There are currently about 60 respondents.



### Collection Methods

Survey data are collected by mail every month. The filing deadline is the 20th calendar day of the month following the report period. The response rate as of the filing deadline is about 98 percent. Late respondents are contacted by telephone. All responses are processed each month before release of the data for publication.

## Note 1.5 ERA-60: Reports of Oil Imports into the United States and Puerto Rico

### Background

The "Report of Oil Imports into the United States and Puerto Rico" (ERA-60) survey was designed by the Economic Regulatory Administration (ERA) of the Department of Energy to collect data on port of entry, country of origin, destination, and quantity of imported crude oil and petroleum products, as well as sulfur content and API gravity. All licensed importers and importers of record are required to report. The "Shipments of Refined Products from Puerto Rico to the United States" (P-133-M-O) survey was designed to collect data on imports to the United States that are not covered by the ERA-60.

### Universe

The monthly submission of Form ERA-60 and P-133-M-O is required by all licensed importers and importers of record into the United States and Puerto Rico. The respondent universe consisted of approximately 750 firms as of June 30, 1981. The respondent universe for these surveys is updated whenever an import license is granted by the Office of Oil Imports of the ERA.

### Collection Methods

The survey data are collected by mail each month. It is mandatory for each respondent to file the ERA-60/P-133-M-O by the 15th working day of the month following the reporting period. Resubmissions are received frequently and are processed when received.

### Response Rates

In December 1980, the survey had a response rate of 92 percent by the filing deadline. The universe was 640 at that time. (Because this is a dynamic survey, the universe is constantly changing.) Standard followup of nonrespondents is made to insure that all reports are received, since data are not imputed for nonrespondents. Response rate is generally 98-99% by the time the data are first published. Revised publications are not generated as standard operating procedure. The ERA-60 file is never closed; resubmissions are constantly received and processed.

## Note 1.6 Census Import (IM-145) and Export (EM-522 and EM-594) Tabulations

The foreign trade statistics program, conducted by the Bureau of the Census, involves compilation and dissemination of a large body of data relating to the imports and exports of the United States.

### Import Statistics

#### Coverage

The import statistics reflect both government and nongovernment imports of merchandise from foreign countries into the U.S. Customs territory (includes the 50 States, the District of Columbia, and Puerto Rico), without regard to whether or not a commercial transaction is involved. In general, the statistics record the physical movement of merchandise into the United States from foreign countries, with the exception of the following types of transactions that are excluded from the statistics:

1. Merchandise shipped in transit through the United States, when documented with Customs as an intransit movement.
2. Shipments between the United States and Puerto Rico, the Virgin Islands, Guam, American Samoa, and other U.S. possessions; shipments between any of these outlying areas; and imports into U.S. possessions from foreign countries.
3. U.S. merchandise returned by U.S. Armed Forces for their own use.

#### **Source of Import Information**

The official U.S. import statistics are compiled by the Bureau of the Census from copies of the import entry and warehouse withdrawal forms that importers are required by law to file with Customs officials (Customs Forms 7501- 7505).

Imported petroleum is reported as "Imports for Consumption." Imports for consumption are a combination of entries for immediate consumption and withdrawals from warehouses for consumption. With certain exceptions as indicated above, these data generally reflect the total of commodities entered into U.S. consumption channels.

#### **Country and Area of Origin**

The country reported in the statistics as the country of origin is defined as the country where the merchandise was grown, mined, or manufactured. In instances where the country of origin cannot be determined, the transactions are credited to the country of shipment.

### **Export Statistics**

#### **Coverage**

The export statistics reflect both government and nongovernment exports of domestic and foreign merchandise from the U.S. Customs territory (includes the 50 States, the District of Columbia, and Puerto Rico) to foreign countries, without regard to whether or not the exportation involves a commercial transaction. In general, the statistics record the physical movement of merchandise out of the United States to foreign countries, with the exception of the following types of transactions:

1. Shipments between the United States and Puerto Rico, the Virgin Islands, Guam, American Samoa, and other U.S. possessions; between any of these outlying areas; and shipments from U.S. Possessions to foreign countries.
2. Merchandise shipped in transit through the United States from one foreign country to another, when documented as such with U.S. Customs.
3. Bunker fuels and other supplies and equipment for use on departing vessels, planes, or other carriers engaged in foreign trade.

#### **Source of Export Information**

The official U.S. export statistics are compiled by the Bureau of the Census primarily from copies of Shipper's Export Declarations. Shipper's Export Declarations are required to be filed with Customs officials, except when qualified exporters have been authorized to submit data in the form of magnetic tape, punched cards, or monthly Shipper's Summary Export Declarations directly to the Bureau of the Census.

#### **Country and Area of Destination**

The country of destination is defined as the country of ultimate destination or the country where the goods are to be consumed, further processed, or manufactured, as known to the shipper at the time of exportation. If the shipper does not know the country of ultimate destination, the shipment is credited to the last country to which the shipper knows that the merchandise will be shipped in the same form as it was when exported.

## Note 2 Estimation

The geographic coverage of all estimates is the 50 United States and the District of Columbia, including adjacent areas of the outer continental shelf, excluding the Hawaiian Foreign Trade Zone.

### Note 2.1 Supply

The components of petroleum supply are field production, refinery production, imports, stock withdrawal or addition, crude oil used directly, and losses.

**Field Production** is the sum of crude oil (including lease condensate) production, natural gas processing plant production, and new supply (field production) of other liquids used by refineries.

Crude oil production is estimated based on data received from State conservation and revenue agencies. Reports of crude oil production from each of the 31 producing States are not received until several months after the other components of petroleum supply described in Explanatory Note 2.1 are available for publication. For an explanation of the crude oil estimation procedure used until the State reports are complete, see Explanatory Note 2.2.

Field production of natural gas plant liquids (NGPL), including finished petroleum products, is reported monthly on survey Form EIA-64, "Natural Gas Liquids Operation Report." Negative production will occur when the amount of a product produced during the month is less than the amount of that same product that is reprocessed (input) or reclassified to become another product during the same month. For survey description and other detail, see Explanatory Note 1.1.

Field production of natural gas plant liquids (NGPL), including finished petroleum products, is reported monthly on survey Form EIA-64, "Natural Gas Liquids Operations Report." Negative production will occur when the amount of a product produced during the month is less than the amount of that same product that is reprocessed (input) or reclassified to become another product during the same month. For survey description and other detail, see Explanatory Note 1.1.

**Refinery Production** of LRGs, ethane, and finished petroleum products is reported monthly on survey Form EIA-87, "Refinery Report." Published production of these products equals refinery production minus refinery input. Refinery production of unfinished oils and of motor and aviation gasoline blending components appears on a net basis under refinery input. Negative production will occur when the amount of a product produced during the month is less than the amount of that same product that is reprocessed (input) or reclassified to become another product during the same month.

Refinery production is also reported weekly on survey Form EIA-161, "Refinery Report." See Explanatory Notes 1.2 and 1.3 for survey descriptions and other detail. It should also be noted that refineries do not report production of crude oil, natural gasoline, isopentane, unfractionated stream, plant condensate, or other hydrocarbons and alcohol.

**Imports** of crude oil and petroleum products are reported monthly on Form ERA-60, "Report of Oil Imports into the United States and Puerto Rico," and Form P-133-M-O, "Shipments of Refined Products (including unfinished oils) from Puerto Rico to the United States." In addition, the Census Bureau Tabulation IM-145 summarizes import data from Customs import declarations reported on Customs Forms 7501 and 7505. The most prominent difference between the EIA and Census systems appears in imports of liquefied petroleum gases (LPG), where Census data show a much higher level of imports than Energy Information Administration data. This occurs because the ERA-60 respondent frame was built by monitoring importers of licensed products and because LPGs are not licensed products. Therefore, respondents that only import LPGs have not been identified, and do not report these imports to the Department of Energy. Since these importers are required to file form 7501 with the U.S. Customs Service, EIA obtains data on imports of LPGs from Census Tabulation IM-145. Additional data taken from the IM-145 are relatively small quantities of naphtha and kerosene-type jet fuels, distillate fuel oils, and residual fuel oils withdrawn from bonded storage for use in international trade and for military offshore use. Even though these duty-free fuels are stored on United States shores, they did not enter the United States for domestic consumption and therefore are not included in the ERA-60 reporting system.

Imports are also reported weekly on survey Form EIA-165, "Imports Report." See Explanatory Notes 1.3, 1.5, and 1.6 for survey descriptions and other detail.

**Stock Withdrawal (+) or Addition (-)** is calculated by subtracting stocks at the end of the month from stocks at the beginning of the month. (Note: The beginning stocks of one month are equal to the ending stocks of the previous month.) A positive result (+) would represent a withdrawal from stocks and an increase in petroleum supplies distributed for domestic consumption. A negative result (-) would represent a buildup of stocks and reduce petroleum supplies distributed for domestic consumption. For survey forms used to make stock withdrawal or addition calculations see Explanatory Note 2.4.

**Unaccounted-for Crude Oil** is a balancing item that represents the difference between crude oil supply and disposition. Crude oil supply is the sum of field production, imports and stock withdrawal or addition, less crude used directly and losses. Crude oil disposition is the sum of exports and refinery input.

Unaccounted-for crude oil is calculated by subtracting crude oil supplies from crude oil disposition. A negative result indicates that refiners and exporters reported use of more crude oil than was reported to have been available to them. (This occurs, for example, when imports are undercounted due to late reporting or other problems.) A negative result would indicate that more crude oil was reported to have been supplied to refiners and exporters than they reported used. This calculation is performed for crude oil to ensure that product supplied for crude oil is always zero.

**Crude Oil Used Directly and Losses** is the sum of crude oil losses at refineries, crude oil burned at refineries, and crude oil burned on leases. Crude oil losses and consumption at refineries are reported on Form EIA-87, "Refinery Report." Crude oil burned on leases is reported on Form EIA-90, "Crude Oil Stocks Report." Crude oil burned on leases is divided into two categories: crude burned as residual fuel oil and crude burned as distillate fuel oil. Crude burned on leases appears as a negative supply to crude oil (a reduction in crude oil supplies) and as a positive supply to residual and distillate fuel oil (an increase to these supplies).

## Note 2.2: Domestic Crude Oil Production

Data for the Crude Oil Production System (COPS) are reported to the Department of Energy by each of the individual State conservation agencies, which collect crude oil production values for tax purposes. In addition, the U.S. Geological Survey reports the volume of crude oil that is produced offshore in Federally-owned waters. With the exception of six State conservation agencies, all of these reports are received monthly. After each calendar year, these monthly numbers are updated using the annual reports from the State conservation agencies and the U.S. Geological Survey. The six States that do not report monthly values are Indiana, New York, Ohio, Pennsylvania, West Virginia, and Wyoming. Monthly values are estimated for these States using the individual linear trends of their historical annual crude oil production values.

There is a time lag of approximately 3 to 4 months between the end of the reporting month and the time when the actual values are available for this publication. In order to provide more timely crude oil production estimates, the Department of Energy has established a series of statistical models that forecast the volume of crude oil production based on the historical production patterns. The models use Auto Regressive Integrated Moving Average (ARIMA) to analyze series of monthly crude oil production values collected over several years.

In order to provide detailed crude oil production information on both the PAD District level and for the major producing States, the total United States crude oil production volume was separated into nine distinct groupings. The nine different time series are the monthly reported crude oil production volumes for: (1) all the States in PAD District 1; (2) all the states in PAD District 2; (3) Texas; (4) Louisiana; (5) the States in PAD District 3 excluding Texas and Louisiana; (6) all the States in PAD District 4; (7) Alaska; (8) California; and (9) the States in PAD District 5 excluding Alaska and California. Monthly data collected beginning in January 1973 are used for each of these time series.

A separate ARIMA model is identified for each time series. New model parameters are estimated monthly for each of these nine updated time series. Then, these ARIMA models are used to forecast crude oil production volumes for the month of interest. These values are then aggregated into PAD District and national totals. The forecasts made during 1981 had an average error of less than 0.6 percent compared to the monthly crude oil production volumes eventually reported by the States.

## Note 2.3 Disposition

The components of petroleum disposition are refinery input, exports, and products supplied for domestic consumption.

Refinery Inputs of crude oil, NGPL and other liquids are reported monthly on survey Form EIA-87, "Refinery Report." Published inputs of unfinished oils, and motor and aviation gasoline blending components, equal refinery input minus refinery output. Refinery inputs of finished petroleum products are reported on a net basis under refinery production. Refinery inputs are also reported weekly on survey Form EIA-161, "Refinery Report." See Explanatory Notes 1.2 and 1.3 for survey description and other details.

Exports of crude oil and petroleum products are compiled from Census Bureau tabulations EM522 and EM594. Exports include crude oil shipments to Puerto Rico, the Virgin Islands, and the Hawaiian Foreign Trade Zone, which are obtained from refinery receipts reported on Form EIA-87.

Product supplied for each product is calculated by summing field production plus refinery production, plus imports, plus stock withdrawal or minus stock addition, plus crude oil used directly and losses (plus net receipts when calculated on a PAD District basis), minus refinery input, minus exports. This formula ensures that total disposition equals total supply. Products supplied indicates those quantities of petroleum products supplied for domestic consumption. Occasionally, the result for a product is negative when total disposition of that product exceeds total supply. Negative product supplied may occur for a number of reasons: (1) product reclassification has not been reported, (2) misreporting or delayed reporting of data, and (3) for calculations on a PAD District basis, incomplete coverage of interdistrict movements data compiled to calculate net receipts.

## Note 2.4 Stocks

Primary stocks of crude oil are the sum of ending stocks reported monthly on Form EIA-87, "Refinery Report," and Form EIA-90, "Crude Oil Stocks Report." Crude oil held in the Strategic Petroleum Reserve is included unless otherwise noted. Alaskan crude oil in transit is also included. Stocks of crude oil are also reported weekly on Form 161, "Refinery Report," and Form EIA-164, "Crude Oil Stocks Report." Primary stocks of petroleum products are summed from data reported on the Form EIA-64, "Natural Gas Liquids Operations Report," Form EIA-87, "Refinery Report," Form EIA-88, "Bulk Terminal Stocks Report," and Form EIA-89, "Pipeline Products Stocks Report." Primary stocks of petroleum products do not include secondary stocks held by dealers and jobbers, or stocks held by consumers. Petroleum product stocks are also reported weekly on Form EIA-161, "Refinery Report," Form EIA-162, "Bulk Terminal Stocks Report," and Form EIA-163, "Pipeline Products Stocks Report." For survey descriptions and other details see Explanatory Notes 1.1., 1.2, and 1.3.

## Note 2.5 Average Stock Levels

The graphs displaying monthly stock levels of petroleum products, crude oil, motor gasoline, distillate fuel oil, residual fuel oil, liquified petroleum gases and ethane, and other products provide the user with recent data as well as a summary of data from the most recent 3 year period from January through December or from July through June. This summary takes the form of an "average range" that includes seasonal variation determined from a longer time period. The average range represents the historical pattern; it is not a forecast.

These curves are updated every 6 months effective January 1 or July 1 by basing the "average ranges" on a more recent time period. At that time, each 3-year data series will be adjusted by dropping the first 6 months and including the most recent 6 months.

For each data series, the monthly seasonal factors were estimated by means of a seasonal adjustment technique developed at the Bureau of Census (Census X-11). The seasonal factors were assumed to be stable (i.e., unchanging from year to year) and additive (i.e., the series is deseasonalized by subtracting the seasonal factor for the appropriate month from the reported stock levels). The intent of deseasonalization is to remove only seasonal variation from the data. Thus, a deseasonalized series would contain the same trends and irregularities as the original data. For crude oil stocks, the derived seasonal factors were very small relative to crude oil stock levels. Therefore, the seasonal factors for crude oil stock levels were set to zero. The seasonal factors for total petroleum (crude and products), distillate fuel oil, residual fuel oil, liquefied petroleum gases and ethane, and other products were derived using monthly data from 1974-1980. For motor gasoline, the seasonal factors were based on monthly data from 1975, 1976, 1978, 1979 and 1980. In 1977, there was virtually no seasonal behavior in motor gasoline stocks. Monthly stock levels stayed at the same high level for the entire year. In addition, the seasonal patterns in 1973 and 1974 appeared to be different from those in recent years. It was therefore assumed that the seasonal patterns in 1973, 1974, and 1977 were not representative of the recent past, and these years were not used in the determination of seasonal patterns for motor gasoline stocks. Because of these differences in the year-to-year seasonal fluctuation of motor gasoline, the evidence for the illustrated seasonal patterns for total petroleum (crude and products), crude oil, distillate fuel oil, residual fuel oil, liquefied petroleum gases and ethane, and other products is stronger than is the evidence for the illustrated seasonal patterns for motor gasoline.

In some cases, these seasonal patterns do not show a smooth transition from month to month. For example, the June factor for residual fuel oil is slightly less than the May and July values, making a bump in the curve. As there is little difference in the magnitude of these seasonal factors, it is possible that this variation is due to the small number of observations (7 years) and the data variability.

After seasonal factors are derived, the most recent 3 year period (from January through December or from July through June) is deseasonalized. The average of the deseasonalized 36-month series determines the midpoint of the deseasonalized average band. The standard error of the deseasonalized 36 months is calculated adjusting for extreme data points. The width of the "average range" is twice this standard error.

The upper curve of the "average range" is defined as the average plus the seasonal factors plus the standard error. The lower curve is defined as the average plus the seasonal factors minus the standard error.

## Note 2.6 Movements

Movements of crude oil between PAD Districts are reported on Form EIA-170, "Tanker and Barge Report." Petroleum product movements are reported on Forms EIA-170 and EIA-89, "Pipeline Products Report." Net receipts are calculated by summing total movements into and total movements from each PAD District by pipelines, tankers, and barges, and subtracting for the difference. Movements of crude oil by pipeline are not reported. For survey descriptions and other detail, see Explanatory Notes 1.2 and 1.4.

## Note 2.7 Preliminary Monthly Statistics

Data from the Weekly Petroleum Reporting System (Forms EIA-161, 162, 163, 164 and 165) are used to estimate the most recent monthly values for the historical statistics. Since some of the weekly reporting periods overlap 2 adjacent months, it is necessary to use weighting factors in the calculation of the monthly values.

To calculate monthly estimates of crude oil and petroleum product imports, crude oil input to refineries, and production of petroleum products for a specific month, the weekly estimates are weighted by the number of days of that month included in each week, then summed.

End-of-month stock levels of crude oil and the major products (motor gasoline, distillate fuel and residual fuel) are calculated in a similar manner, but use only the two weekly reporting periods that cover the end-of-week stocks before and after the end of the month. The end-of-month stock level is calculated by first calculating the stock change between the 2 weeks. The daily stock change between the two end-of-week stock levels is then calculated. This number is multiplied by the weighting factor of earlier of the 2 weeks (the week that covers the last day of the month of interest). This change is added to the earlier of the two end-of-week stock levels to estimate the end-of-month stock level.

Preliminary monthly estimates of domestic crude oil production are calculated as described in Explanatory Note 2.2.

### Note 3 Accuracy of Petroleum Supply Data

Early in 1981, the Energy Information Administration completed an assessment of the accuracy of principal petroleum supply data series. This assessment concentrated on two methods of analysis:

- Comparisons between EIA's final annual estimates published in the *Petroleum Statement Annual (PSA)* and annual estimates from independent sources.
- Comparisons between EIA's final monthly estimates published in the *PSA* and EIA's earlier estimates published in the *Monthly Petroleum Statistics Report* and the *Petroleum Statement, Monthly* (predecessor of the *Monthly Petroleum Statement*).

Selected excerpts from these comparisons are presented below.

#### Comparisons of Annual Estimates

All of the systems that provide data for the *Petroleum Supply Monthly*, except for the weekly systems, try to collect data from the entire universe of their potential respondents. They do not sample, and have no sampling errors. Inaccuracies in the data still occur because of problems such as incomplete lists of respondents, errors in the responses, and conceptual errors in the design of the data systems. Such inaccuracies are hard to identify and even harder to quantify. Some understanding of the overall accuracy of the estimates can be achieved by comparing estimates derived from independent sources of data, as shown in the following tables. Close agreements among annual estimates from several independent sources support the conclusion that the estimates are accurate, and accuracy in the annual estimates implies accuracy in the monthly estimates that comprise the annual estimates.

#### Crude Oil Production

Comparisons among independent estimates of annual crude oil and lease condensate production lead to the conclusion that the *PSA* estimates are probably accurate to within 1 percent.

#### Crude Oil Imports

Comparisons among independent estimates of annual crude oil imports lead to the conclusion that the *PSA* estimates are probably accurate to within 1 percent. This conclusion is supported by a study of EIA and Customs/Census import data performed for EIA.<sup>2</sup>

#### Motor Gasoline Supplied

Comparisons among independent estimates of the annual volume of motor gasoline supplied for domestic use show that differences in the estimates grew between 1977 and 1979. By 1979, the EIA estimate of sales by refiners and the Environmental Protection Agency's estimate of production had grown about 5-7 percent larger than the comparable *PSA*, Lundberg, and American Petroleum Institute (API) estimates. Research conducted by EIA in 1979 and 1980<sup>3</sup> confirmed that the lower

<sup>1</sup>An Assessment of the Accuracy of Principal Data Series of the Energy Information Administration, DOE/EIA-0292, June 1981.

<sup>2</sup>Maxima Corporation, *Petroleum Imports Reporting Systems, Preliminary Draft*, (Silver Spring, Maryland: February 1980). Prepared for the Office of Energy Information Validation, Energy Information Administration, U.S. Department of Energy, Washington, D.C.

<sup>3</sup>Office of Energy Information Validation, Energy Information Administration, U.S. Department of Energy, *An Evaluation of Published EIA Gasoline Supply Estimates* (Washington, D.C.: April 1980).



estimates were inaccurate, and identified changes in the petroleum industry that had an adverse effect on the PSA estimate. During 1980, EIA developed and tested improved procedures for collecting petroleum supply data, and implemented them in January 1981. (See Explanatory Note 4.)

#### Distillate Fuel Oil Supplied

Comparisons among independent estimates of the annual volume of distillate fuel oil supplied for domestic use lead to the conclusion that the PSA estimates are probably accurate to within 1 to 2 percent.

#### Residual Fuel Oil Supplied

Comparisons among independent estimates of the annual volume of residual fuel oil supplied for domestic use seem to show sizable and consistent differences between the EIA estimates of sales by refiners and the PSA and API estimates. When imports of residual fuel oil by nonrefiners are added to the refiner sales, however, the difference between refiner sales and the PSA estimates are narrowed to within 1 percent. The comparisons therefore lead to the conclusion that the PSA estimates are probably accurate to within 1 to 2 percent.

#### Comparison of Estimates of the Volume of Crude Oil and Lease Condensate Production, 1977-1979

	Estimated Volume of Production in Millions of 42-U.S. Gallon Barrels <sup>a</sup>			Comparative Estimate as a Percent of the PSA Estimate		
	1979	1978	1977	1979	1978	1977
EIA Estimate from Petroleum Statement Annual <sup>b</sup>	3,121	3,178	3,009	///	///	///
Comparative Estimates						
American Petroleum Institute Estimate from API Monthly Statistical Report <sup>c</sup>	3,130	3,214	3,021	100.3%	101.1%	100.4%
Census Estimate from the Annual Survey of Oil and Gas <sup>d</sup>	—	3,148	3,016	—	99.1%	100.2%
Oil and Gas Journal Estimates <sup>e</sup> of Total Production derived from Monthly Data	3,168	3,165	3,005	101.5%	99.6%	99.9%
EIA Estimate from Annual Survey of Oil and Gas Reserves (EIA-23) <sup>f</sup>	3,102	3,144	3,001	99.4%	98.9%	99.7%
/// = Not applicable						
— = Not available						

<sup>a</sup>Volumes are rounded to the nearest million barrels.

<sup>b</sup>From Table 6 in EIA's *Petroleum Statement Annual*, 1977, 1978, 1979.

<sup>c</sup>From issues of the American Petroleum Institute's *Monthly Statistical Report*. The annual values were obtained by summing the monthly values for each of the twelve-month periods.

<sup>d</sup>From Table 1, p.2 of the Bureau of Census' *Annual Survey of Oil and Gas*, 1978.

<sup>e</sup>From issues of the *Oil and Gas Journal*. Monthly estimates are in thousands of barrels per day. They are converted to millions of barrels by dividing by 1,000 and multiplying by the number of days in the reporting period.

<sup>f</sup>From EIA's *U.S. Crude Oil and Natural Gas Reserves 1979 Annual Report* (Table 19, p. 33), *1978 Annual Report* (Table 16, p. 20), and *1977 Annual Report* (Table 22, p.36).

Geographic coverage: the 50 United States and District of Columbia with adjacent areas of the Outer Continental shelf.

SOURCE: *An Assessment of the Accuracy of Principal Data Series of the Energy Information Administration*, DOE/EIA-0292.



# Comparison of Estimates of the Volume of Crude Oil Imports, 1977-1979

	Volume of Millions of 42-U.S. Gallon Barrels <sup>a</sup>			Comparative Estimates as a Percent of the Primary Estimate		
	1979	1978	1977	1979	1978	1977
EIA Estimate of Receipts at Ports of Entry (ERA-60) from <i>Petroleum Statement, Annual</i> <sup>b</sup>	2,380	2,320	2,414	///	///	///
<u>Comparative Estimates</u>						
American Petroleum Institute Estimate of Receipts as Reported by Refiners <sup>c</sup>	2,346	2,323	2,360	98.6%	100.1%	97.8%
Customs/Census Estimate of Receipts at Ports of Entry (Customs Forms 7501 and 7502) <sup>d</sup>	2,415	2,338	2,431	101.5%	100.8%	100.7%
EIA Estimate of Inputs of Foreign Crude at Refineries (ETA-87) <sup>e</sup>	2,364	2,334	2,431	99.3%	100.6%	100.7%

/// = Not applicable

<sup>a</sup>Volumes are rounded to the nearest million barrels.

<sup>b</sup>From Table 1 in EIA's *Petroleum Statement Annual* 1977, 1978, 1979. This table also includes imports for the Strategic Petroleum Reserve (SPR) which were 7.5 million in 1977, 58.8 million in 1978, and 24.4 million in 1979.

<sup>c</sup>Estimate equals the sum of the annual estimate of imports derived from API's *Monthly Statistics Report* (which excludes imports for SPR), and the EIA estimates for imports for the SPR which are listed in footnote b above. The annual estimates from API data are equal to the sum of the API monthly estimates weighted by the number of days in each month.

<sup>d</sup>Data on imports to Puerto Rico which are included in the source for these estimates have been excluded from these estimates in keeping with the geographic coverage of the table. Data are from computer printouts of the Bureau of Census Report IM-245-X dated April 3, 1980 (1977 and 1978 data) and December 19, 1980 (1979 data).

<sup>e</sup>Estimate equals refinery inputs of foreign crude plus (minus) stock increases (decreases) of foreign crude. The data for the computation are published in EIA's *Petroleum Statement, Annuals*. The stock changes (all increases) are derived from data on stocks of crude oil at refineries, bulk terminals, and pipelines as reported on Form EIA-90, plus the increase in the SPR. This estimate excludes crude oil imported and not used as refinery input.

Geographic coverage: the 50 United States and the District of Columbia.

SOURCE: *An Assessment of the Accuracy of Principal Data Series of the Energy Information Administration*, DOE/EIA-0292.

**Comparison of Estimates of the Volume of Motor Gasoline Supplied for Domestic Use, 1977-1979**

	Volume in Millions of 42-U.S. Gallon Barrels <sup>a</sup>			Volume Supplied as a Percent of the PSA Estimate		
	1979	1978	1977	1979	1978	1977
EIA Estimate from <i>Petroleum Statement, Annual</i> <sup>b</sup>	2,573	2,711	2,625	///	///	///
<u>Comparative Estimates</u>						
EIA Estimate of Sales by Refiners (P-306) <sup>c</sup>	2,708	2,792	2,671	105.2%	103.0%	101.8%
Environmental Protection Agency Estimate derived from Production Data <sup>d</sup>	2,766	2,851	2,706	107.5%	105.2%	103.1%
Lundberg Surveys, Inc. Estimate of U.S. Motor Gasoline Sales <sup>e</sup>	2,631	2,746	2,656	102.3%	101.3%	101.2%
American Petroleum Institute Estimate of Deliveries <sup>f</sup>	2,579	2,697	2,612	100.2%	99.5%	99.5%

/// = Not applicable

<sup>a</sup>Volumes are rounded to the nearest million 42-U.S. gallon barrels.

<sup>b</sup>Derived from Table 2 in EIA's *Petroleum Statement Annual*, 1977, 1978, 1979.

<sup>c</sup>Derived from Table 1 of EIA's December issue of *Petroleum Market Shares, Report on Sales of Refined Petroleum Products* 1977, 1978, 1979.

<sup>d</sup>The estimate shown is derived by substituting EIA Domestic Production values with values of domestic production tabulated from the Environmental Protection Agency Bq. Form 3520-2, "Lead Additive Report for Refineries." The EPA production estimates are 2,694 million barrels in 1977, 2,757 in 1978, and 2,648 in 1979 as compared from a summary sheet provided by Mr. Bob Summerhayes of EPA.

<sup>e</sup>From the mid-June issues of the "National Petroleum News," 1979 and 1980.

<sup>f</sup>API publishes monthly estimates in thousands of barrels per month of the volume of motor gasoline delivered from primary storage. The initial published monthly estimate is derived from API sources, but in later API publications the estimates are revised using EIA data. The values shown in the table are equal to the sums of the initial published API monthly estimates of motor gasoline multiplied by the number of days per month.

Geographic coverage: the 50 United States and the District of Columbia.

SOURCE: *An Assessment of the Accuracy of Principal Data Series of the Energy Information Administration*, DOE/EIA-0292.

**Comparison of Estimates of the Volume of Distillate Fuel Oil (Including Kerosene) Supplied for Domestic Use, 1977-1979**

	Volume in Millions of 42-U.S. Gallon Barrels <sup>a</sup>			Volume Supplied as a Percent of the PSA Estimate		
	1979	1978	1977	1979	1978	1977
EIA Estimate from <i>Petroleum Statement Annual</i> <sup>b</sup>	1,269	1,307	1,275	///	///	///
<u>Comparative Estimates</u>						
EIA Estimate of Sales by Refiners (P-306) <sup>c</sup>	1,282	1,275	1,242	101.0%	97.6%	97.4%
American Petroleum Institute Estimate of Deliveries <sup>d</sup>	1,291	1,300	1,277	101.7%	99.5%	100.2%

/// = Not applicable

<sup>a</sup>Volumes are rounded to the nearest million 42-U.S. gallon barrels.

<sup>b</sup>Derived from Table 2 in EIA's "Petroleum Statement Annual", 1977, 1978, 1979.

<sup>c</sup>Derived from Table 1 of EIA's December issue of *Petroleum Market Shares, Report on Sales of Refined Petroleum Products*, 1977, 1978, 1979.

<sup>d</sup>API publishes monthly estimates in thousands of barrels per month of the volume of distillate and kerosene delivered from primary storage. The initial published monthly estimate is derived from API sources, but in later API publications the estimates are revised using EIA data. The values shown in the table are equal to the sums of the initial published API monthly estimates of distillate and kerosene multiplied by the number of days per month.

Geographic coverage: the 50 United States and the District of Columbia.

SOURCE: *An Assessment of the Accuracy of Principal Data Series of the Energy Information Administration*, DOE/EIA-0292.

Comparison of Estimates of the Volume of Residual Fuel Oil Supplied for Domestic Use, 1977-1979.

	Volume in Millions of 42-U.S. Gallon Barrels <sup>a</sup>			Volume Supplied as a Percent of the PSA Estimates		
	1979	1978	1977	1979	1978	1977
EIA Estimate from <i>Petroleum Statement, Annual</i> <sup>b</sup>	1,024	1,095	1,109	///	///	///
<u>Comparative Estimates</u>						
EIA Estimate of Sales by Refiners (P-306) <sup>c</sup>	796	832	847	80.8%	79.6%	80.1%
American Petroleum Institute Estimate of Deliveries <sup>d</sup>	1,044	1,101	1,114	102.0%	100.5%	100.4%

/// = Not Applicable

<sup>a</sup>Volumes are rounded to the nearest million 42-U.S. gallon barrels.

<sup>b</sup>Derived From Table 2 in EIA's *Petroleum Statement Annual*, 1977, 1978, 1979. Refinery fuel use, subtracted from the figures in the source referenced below, has been reinstated in these estimates.

<sup>c</sup>Derived from Table 1 of EIA's December issue of *Petroleum Market Shares, Report on Sales of Refined Petroleum Products*, 1977, 1978, 1979.

<sup>d</sup>API publishes monthly estimates in thousands of barrels per month of the volume of residual fuel oil delivered from primary storage. The initial published monthly estimate is derived from API sources, but in later API publications the estimates are revised using EIA data. The values shown in the table are equal to the sums of the initial published API monthly estimates of residual fuel oil multiplied by the number of days per month.

Geographic Coverage: the 50 United States and the District of Columbia.

SOURCE: *An Assessment of the Accuracy of Principal Data Series of the Energy Information Administration*, DOE/EIA-0292.

## Comparisons of Monthly Estimates Over Time

Inaccuracies in petroleum data resulting from incomplete or delayed reports from respondents and from data processing errors are usually eliminated from the final PSA estimates. Such inaccuracies can still have important effects on the monthly estimates published in the *Petroleum Supply Monthly* and its predecessors. The following tables compare the initial monthly estimates published in the *Monthly Petroleum Statistics Report* and the *Petroleum Statement, Monthly* with the final monthly estimates published in the PSA. During 1977-1979, the *Monthly Petroleum Statistics Report* was published about 60 days after the end of the reporting month, and the *Petroleum Statement, Monthly* was published about 120-150 days after the end of the reporting month. The tables show that, both in terms of bias and in terms of standard deviation, the later estimates are consistently more accurate than the earlier estimates. In spite of this, the earlier estimates may have been more valuable to users of energy information because of the large difference in timeliness.

For purposes of comparison, the *Petroleum Supply Monthly* is scheduled to be published on about the same time lag as the *Monthly Petroleum Statistics Report*. Caution should be exercised, however, in drawing conclusions from this similarity. The *Petroleum Supply Monthly* uses improved data processing procedures developed and successfully implemented during 1981. In addition, since 1979, EIA has greatly improved the accuracy of its 60-day crude oil production estimates and is making progress in improving the accuracy of its 60-day import estimates.

**Initial Monthly Estimates of Production, Stocks, and Imports of Crude Oil As A Percent of EIA's Final Published Estimates <sup>a</sup>**  
**January 1977 - December 1979**

	Production During Month		Primary Stocks At End of Month		Imports During Month	
	Mean Percent	Standard Deviation	Mean Percent	Standard Deviation	Mean Percent	Standard Deviation
EIA's Estimates from the <i>Monthly Petroleum Statistics Report<sup>b</sup></i>	# 98.7%	1.6%	# 98.3%	1.4%	# 95.4%	2.4%
EIA's Estimates from the <i>Petroleum Statement, Monthly<sup>c</sup></i>	# 99.6%	0.6%	100.0%	0.1%	# 98.4%	1.3%

**Initial Monthly Estimates of Products Supplied for Domestic Use as A Percent of EIA's Final Published Estimates <sup>a</sup>**  
**January 1977 - December 1979**

	Motor Gasoline		Distillate Fuel Oil		Residual Fuel Oil	
	Mean Percent	Standard Deviation	Mean Percent	Standard Deviation	Mean Percent	Standard Deviation
EIA's Estimates from the <i>Monthly Petroleum Statistics Report<sup>b</sup></i>	99.9%	1.3%	99.9%	2.3%	# 97.9%	2.7%
EIA's Estimates from the <i>Petroleum Statement, Monthly<sup>c</sup></i>	100.0%	0.3%	99.7%	0.5%	99.4%	1.2%

**Initial Monthly Estimates of End-of-Month Primary Stocks As a Percent of EIA's Final Published Estimates <sup>a</sup>**  
**January 1977 - December 1979**

	Motor Gasoline		Distillate Fuel Oil		Residual Fuel Oil	
	Mean Percent	Standard Deviation	Mean Percent	Standard Deviation	Mean Percent	Standard Deviation
EIA's Estimates from the <i>Monthly Petroleum Statistics Report<sup>b</sup></i>	99.7%	0.8%	99.7%	1.1%	100.1%	0.7%
EIA's Estimates from the <i>Petroleum Statement, Monthly<sup>c</sup></i>	99.9%	0.2%	100.0%	0.1%	100.1%	0.5%

# Represents a difference from 100% found to be statistically significant at the 95% level of confidence (n = 36).

<sup>a</sup>Final monthly estimates are from the "Petroleum Statement, Annual" for 1977, 1978 and 1979. The mean percent is calculated as follows: each preliminary estimate is first expressed as a percent of EIA's final published estimate, these are then summed and the sum is divided by the number of estimates. The standard deviation is the square root of the quantity computed by summing the squared deviation of the percents from the mean percent and then dividing by the number of percents.

<sup>b</sup>Based on 36 initial estimates appearing in issues dated January 1977 - December 1979.

<sup>c</sup>Based on 36 initial estimates appearing in issues dated January 1977 - December 1979.

SOURCE: *An Assessment of the Accuracy of Principal Data Series of the Energy Information Administration*, DOE/EIA-0292.

## Note 4 Changes in Petroleum Industry Reporting

Petroleum statistics contained in this report for all years through 1980 were developed using definitions, concepts, reporting procedures and aggregation methods that are consistent with those developed by the U.S. Bureau of Mines. Research conducted by the Energy Information Administration in 1979 and 1980 indicated that changes had occurred in the petroleum industry that were not being adequately reflected in EIA's reporting systems.

EIA reporting forms, definitions, and procedures were modified beginning in January 1981 to describe industry operations more accurately. Unfortunately, empirical information is not available to precisely measure the data shortcomings throughout 1980. However, estimates of the magnitudes of differences in the major data series are described below to form a basis for comparing 1979, 1980, and 1981 data.

### Motor Gasoline

Prior to 1979, the EIA product-supplied series for motor gasoline was consistently about 2 percent lower than the Federal Highway Administration (FHWA) gasoline-sales data series, which is derived from State tax receipts. This difference increased to about 4 percent in 1979 and 5 percent in 1980. There are two primary causes for this growing difference. First, refinery operations, particularly the flows of unfinished oils and the redesignation of some finished products, were not being accurately described on the EIA survey forms. Second, a large amount of gasoline was being produced away from refineries at "downstream blending stations" to take advantage of provisions in regulations governing the amount of lead that could be added. These blending stations were not reporting gasoline production to the EIA until the data system was changed in January 1981.

Quantitative estimates of the magnitude of the difference—in EIA's gasoline product supplied data in 1979 and 1980 have been made by the EIA and the American Petroleum Institute (API). The following table provides 1979 and 1980 data as published in the *Petroleum Statement Annual*, as well as EIA and API estimates of "recast" motor gasoline product supplied. EIA recast estimates were based upon preliminary monthly information in the *Monthly Petroleum Statement*. The ranges displayed in the EIA column reflect uncertainty in the estimates. Also shown are the FHWA motor gasoline sales statistics for those years. EIA has recently published a study of the quality of these FHWA data.<sup>1</sup>

<sup>1</sup>Office of Energy Information Validation, Energy Information Administration, U.S. Department of Energy, *Error Profile of the Motor Fuel Taxation Data used to Establish and Monitor State Emergency Conservation Targets* (Washington, D.C.: December, 1981).

**Finished Motor Gasoline Product Supplied on Old and New Basis  
(Thousand Barrels per Day)**

	1979				1980			
	EIA Reported	API Recast	EIA Recast	FHWA <sup>1</sup>	EIA Reported	API Recast	EIA Recast	FHWA <sup>1</sup>
Jan	6,830	7,230	7,084- 7,246	6,984	6,323	6,789	6,630- 6,791	6,672
Feb	7,254	7,496	7,389- 7,568	7,538	6,596	6,983	6,831- 7,003	6,830
Mar	7,229	7,414	7,301- 7,463	7,316	6,406	6,753	6,607- 6,768	6,713
Apr	7,055	7,300	7,187- 7,353	7,375	6,800	7,014	6,886- 7,052	6,981
May	7,213	7,429	7,313- 7,475	7,428	6,729	6,954	6,823- 6,984	7,044
Jun	7,191	7,483	7,350- 7,516	7,441	6,657	6,966	6,824- 6,991	7,049
Jul	6,902	7,241	7,105- 7,266	7,299	6,743	6,973	6,960	7,132
Aug	7,330	7,546	7,426- 7,588	7,619	6,648	6,841	6,828	7,090
Sep	6,881	7,122	7,016- 7,262	7,232	6,510	6,692	6,962	6,685
Nov	6,791	7,068	6,956- 7,122	7,142	6,234	6,507	6,516	6,951
Dec	6,730	7,106	6,966- 7,127	7,064	6,632	6,948	6,936	6,993
<b>Average</b>	<b>7,034</b>	<b>7,302</b>	<b>7,183- 7,347</b>	<b>7,309</b>	<b>6,579</b>	<b>6,882</b>	<b>6,806- 6,889</b>	<b>6,925</b>

<sup>1</sup>FHWA gasoline statistics published in their 1979 Table MF-33G, 08-06-80, contain aviation gasoline as well as motor gasoline. Only motor gasoline data are included in published 1980 data. Consequently, the 1979 data shown above were reduced by subtracting aviation gasoline product supplied quantities as published by EIA in the 1979 *Petroleum Statement Annual*. The 1980 FHWA data published in their 1980 Table MF-33GA, August 1981, did not require this adjustment.

### Distillate and Residual Fuel Oil

Distillate and residual fuel oil refinery production statistics through 1980 were adjusted to account for an imbalance between unfinished oil supply and disposition. The reported quantities of refinery inputs of unfinished oils typically exceed the available supply of unfinished oils. It has been assumed that this occurs when distillate and residual fuel oil produced by a refinery is shipped to another refinery, where it is treated as unfinished oil. This oil is then reprocessed rather than used or sold as distillate or residual fuel oil.

For many years (including 1980), the difference between unfinished oil disposition and supply was subtracted from distillate and residual fuel oil production to adjust for this discrepancy. Two-thirds of the difference was applied to distillate, and one-third to residual fuel oil.

Beginning in January 1981 this adjustment was discontinued because there was not sufficient empirical evidence to support it. The following table presents distillate and residual fuel oil refinery production in 1980 as published (adjusted) and on the same basis as 1981 statistics are now being completed (unadjusted) to permit comparison between 1980 and 1981 data series. Adjusted distillate and residual fuel oil product supplied volumes differ from the unadjusted volumes by the same amounts as the adjusted and unadjusted production volumes.

Adjusted and Unadjusted Refinery Production, and Unadjusted Product Supplied of Distillate and Residual Fuel Oils, by Month for 1979 and 1980 (Thousand Barrels Per Day)

1979

Month	Distillate Fuel Oil				Residual Fuel Oil			
	Adj. Ref. Prod.	Unadj. Ref. Prod.	Diff.	Unadj. Product Supplied	Adj. Ref. Prod.	Unadj. Ref. Prod.	Diff.	Unadj. Product Supplied
Jan.	3,043	3,108	65	4,646	1,912	1,946	34	3,594
Feb.	2,888	2,945	57	4,869	1,792	1,822	30	3,625
Mar.	3,019	3,026	7	3,671	1,719	1,723	4	3,243
Apr.	2,945	2,978	32	3,048	1,639	1,656	17	2,524
May	3,066	3,093	27	3,025	1,586	1,600	14	2,517
Jun.	3,153	3,187	35	2,743	1,548	1,566	18	2,601
Jul.	3,305	3,344	38	2,601	1,575	1,594	20	2,471
Aug.	3,321	3,359	38	2,799	1,584	1,603	20	2,570
Sep.	3,354	3,306	-48	2,599	1,627	1,602	-25	2,584
Oct.	3,251	3,217	-34	3,085	1,629	1,612	-17	2,523
Nov.	3,239	3,200	-39	3,208	1,736	1,716	-20	2,795
Dec.	3,221	3,238	17	3,725	1,894	1,903	9	3,022
Average	3,152	3,169	16	3,327	1,687	1,695	8	2,834

1980

Month	Distillate Fuel Oil				Residual Fuel Oil			
	Adj. Ref. Prod.	Unadj. Ref. Prod.	Diff.	Unadj. Product Supplied	Adj. Ref. Prod.	Unadj. Ref. Prod.	Diff.	Unadj. Product Supplied
Jan.	3,013	3,093	80	3,794	1,771	1,812	41	3,108
Feb.	2,766	2,888	122	3,834	1,773	1,836	63	3,168
Mar.	2,557	2,690	133	3,312	1,584	1,652	68	2,726
Apr.	2,460	2,554	94	2,729	1,595	1,643	48	2,492
May	2,474	2,610	136	2,538	1,509	1,579	70	2,305
Jun.	2,646	2,721	75	2,392	1,575	1,613	38	2,359
Jul.	2,689	2,783	94	2,343	1,480	1,528	48	2,339
Aug.	2,461	2,582	121	2,258	1,444	1,506	62	2,348
Sep.	2,686	2,726	40	2,627	1,495	1,516	21	2,380
Oct.	2,589	2,650	61	2,981	1,512	1,543	31	2,258
Nov.	2,703	2,823	120	3,069	1,579	1,641	62	2,513
Dec.	2,891	3,052	161	3,776	1,660	1,743	83	2,762
Average	2,661	2,764	103	2,969	1,580	1,634	54	2,562

Total Petroleum Products

The imbalance between the supply and disposition of unfinished oils is now reported as part of the reclassified products (line 39) in the U.S. Petroleum Balance (Table 1). Imbalances between the supply and disposition of gasoline blending components comprise the remainder of the reclassified in Table 1. These imbalances are reported as negative product supplied in the Other Liquids section of the table of Supply and Disposition Statistics (Table 2). Since these changes only involve redistribution of the volumes of gasoline, distillate and residual fuel oil, gasoline blending components, and unfinished oils, the total volume of petroleum products supplied remains unaffected by them.

## Note 5 Notes on Tables

**5.1 Crude Oil and Petroleum Products Overview** statistics on the referenced line appear in Table 4 of the Detailed Statistics, except where noted.

- Crude Oil and Petroleum Products Stock Withdrawal (+) or Addition (-), Petroleum Products Supplied, Total Imports, Crude Oil Imports, Total Exports, and Crude Oil Exports appear as labeled in Table 4. Total Production and Crude Oil Production appear under Field Production in Table 4.

- Natural Gas Plant Production is the sum of Natural Gas Plant Liquids and Finished Petroleum Products Field Production in Table 4.

- Petroleum Products Imports is the sum of Natural Gas Plant Liquids and LRGs, Other Liquids, and Finished Petroleum Products Imports in Table 4.

- Petroleum Products Exports is the sum of Natural Gas Plant Liquids and LRGs, Other Liquids, and Finished Petroleum Products Exports in Table 4.

- Total Crude Oil and Petroleum Products Ending Stocks appear in thousands of barrels in Table 2.

**5.2 Crude Oil Supply and Disposition** statistics on the referenced line appear in Table 1 of the Detailed Statistics, except where noted.

- Total Domestic Field Production, Alaskan Field Production, SPR Imports, Other Imports (synonymous with Imports Gross Excl. SPR), SPR and Other Primary Stocks Withdrawal (+) or Addition (-), Unaccounted For Crude Oil, Refinery Inputs, and Exports appear as labeled in Table 1.

- SPR Ending Stocks and Other Primary Ending Stocks (synonymous with stocks excluding SPR) appear in thousands of barrels in Table 1.

- Total Crude Oil Ending Stocks appear in thousands of barrels in Table 2.

- Total Imports appear in Table 4.

**5.3 Finished Motor Gasoline Supply and Disposition** statistics on the referenced line appear in Table 4 of the Detailed Statistics, except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.

- Imports, Stock Withdrawal (+) or Addition (-), Exports, and Product Supplied appear as labeled in Table 4.

- Unleaded Percent of Total Product Supplied represents the ratio of finished unleaded motor gasoline product supplied to total finished motor gasoline product supplied, multiplied by 100 and rounded to the nearest tenth.

- Ending Stocks appear in thousands of barrels in Table 2.

**5.4 Distillate and Residual Fuel Oil Supply and Disposition** statistics on the referenced lines appear in Table 4 of the Detailed Statistics, except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.

- Imports, Stock Withdrawal (+) or Addition (-), Crude Used Directly, Exports, and Product Supplied appear as labeled in Table 4.

- Ending Stocks appear in thousands of barrels in Table 2.

**5.5 Liquefied Petroleum Gases and Ethane** statistics represent the aggregation of statistics on ethane, propane, butane, butane-propane mixtures, ethane-propane mixtures, and isobutane. The statistics on the referenced line appear in Table 4 of the Detailed Statistics, except where noted.



- Total Production is the sum of Field Production and Refinery Production in Table 4.
- Imports, Stock Withdrawal (+) or Addition (-), Refinery Inputs, Exports, and Product Supplied appear as labeled in Table 4.
- Ending stocks appear in thousands of barrels in Table 2.

**5.6 Other Petroleum Products Supply and Disposition** statistics represent the aggregation of statistics on natural gasoline, isopentane, unfractionated stream, plant condensate, other liquids, and all finished petroleum products except finished motor gasoline, distillate fuel oil, and residual fuel oil. The statistics on the referenced line are aggregated from Table 4 of the Detailed Statistics, except where noted.

- Total Production is the aggregated sum of Field Production and Refinery Production in Table 4.
- Imports, Stock Withdrawal (+) or Addition (-), Refinery Inputs, Exports, and Product Supplied are aggregated from Table 4.
- Ending stocks are aggregated from ending stocks in thousands of barrels in Table 2.

#### **Note 5.7 Table 1. U.S. Petroleum Balance**

- Lines (1) through (3) of Table 1: Crude oil (including lease condensate) production for "Alaska," "Lower 48 States," and "Total U.S." are calculated by calling the conservation agency in Alaska for Alaskan crude oil production during the month, estimating crude oil production in the United States (see Explanatory Note 2.2), and taking the difference to equal production in the lower 48 states.
- Line (5) of Table 1: SPR imports are reported on Survey Form ERA-60.
- Line (12) of Table 1: "Total Other Sources" equals crude oil stock withdrawal (+) or addition (-) plus unaccounted for crude oil plus crude used as fuel and losses in Table 2.
- Line (14) of Table 1: Natural gas plant liquids (NGPL) "Production" equals field production of natural gas plant liquids (NGPL) plus field production of finished petroleum products in Table 2.
- Line (15) of Table 1: NGPL "Imports" equals the sum of the imports of natural gasoline and isopentane, unfractionated stream, and plant condensate imports in Table 2.
- Line (16) of Table 1: NGPL "Stock Withdrawal (+) or Addition (-)" is equal to the sum of stock withdrawal (+) or addition (-) of natural gasoline and isopentane, unfractionated stream, and plant condensate in Table 2.
- Line (17) of Table 1 equals the sum of lines (14), (15), and (16) of Table 1.
- Line (18) of Table 1: unfinished oils and gasoline blending components "Stock Withdrawal (+) or Addition (-)" equals stock withdrawal (+) or addition (-) for other hydrocarbons and alcohol, for unfinished oils, motor gasoline blending components, and aviation gasoline blending components.
- Line (20) of Table 1: "Other Hydrocarbons and Alcohol New Supply" equals the field production of same in Table 2.
- Line (21) on Table 1: "Refinery Processing Gain" is a balancing item equal to total refinery production minus total refinery input in Table 2.
- Line (22) on Table 1: "Crude Used Directly" equals the sum of crude oil used directly as distillate and residual fuel oils in Table 2.
- Line (23) of Table 1: "Total Other Liquids" equals the sum of lines (18) through (22) of Table 1.
- Line (24) of Table 1: "Total Production of Products" equals crude oil input to refineries plus field production of NGPL and finished petroleum products; plus imports of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (-) of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or

addition (-) of other hydrocarbons and alcohol, unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus imports of unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus field production of other hydrocarbons and alcohol; plus total refinery production; minus total refinery input; plus crude oil used as distillate and residual fuel oils in Table 2.

- Line (25) of Table 1: "Gross Imports of Refined Products" equals imports of LPG and ethane plus imports of finished petroleum products in Table 2.
- Line (26) of Table 1: "Exports of Refined Products" equals exports of LPG and ethane plus exports of finished petroleum products in Table 2.
- Line (27) of Table 1: "Net Imports of Refined Products" equals the difference between lines (25) and (26) of Table (1).
- Line (28) of Table 1: "Total New Supply of Products" equals crude oil input to refineries plus field production of NGPL and finished petroleum products; plus imports of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (-) of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (-) of other hydrocarbons and alcohol, unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus imports of unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus field production of other hydrocarbons and alcohol; plus total refinery production; minus total refinery input; plus crude oil used as distillate and residual fuel oils; plus imports of LPG and ethane and finished petroleum products; minus exports of LPG and ethane and finished petroleum products in Table 2.
- Line (29) of Table 1: "Refined Products Stocks Withdrawal (+) or Addition (-) equals the sum of stock withdrawal (+) or addition (-) for LPG and ethane, and finished petroleum products in Table 2.
- Line (30) of Table 1: "Total Petroleum Products Supplied for Domestic Use" equals total products supplied in Table 2.
- Lines (31) through (37) of Table 1 equal the respective products supplied in Table 2.
- Line (38) of Table 1: "Other Products Supplied" equals the sum of natural gasoline and isopentane, unfractionated stream, plant condensate, aviation gasoline, naphtha < 400 Deg. F for petrochemical feedstock uses, other oils > 400 Deg. F. for petrochemical feedstock use, special naphthas, lubricants, waxes, coke, asphalt, road oil, still gas, and miscellaneous products supplied in Table 2.
- Line (39) of Table 1: "Total Reclassified" is a balancing item equal to the sum of unfinished oils, motor gasoline blending components, and aviation gasoline blending components products supplied in Table 2.
- Line (40) of Table 1: "Total Product Supplied" is equal to total products supplied in Table 2.
- The sum of lines (41) and (42) of Table 1, stocks of "Crude Oil and Lease Condensate (Excluding SPR)" and stocks held by the "Strategic Petroleum Reserve," equals ending stocks of crude oil in Table 2. SPR stocks are reported on Form EIA-90.
- Line (46) of Table 1, stocks of "Refined Products," equals the sum of LPG and ethane and finished petroleum product stocks in Table 2.